CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Receive City of Lodi Transit Needs Assessment and System Plan

MEETING DATE: August 19. 1992

PREPARED BY: Assistant City Manager

RECOMMENDED ACTION: The City Council receive the City of Lodi Transit Needs Assessment and System Plan.

BACKGROUND INFORMATION: For the past number of years the City of Lodi has heard at its Unmet Transit Needs hearings the statement, "The City needs a fixed route bus system." After the 1991-92 hearing the City of Lodi, in conjunction with San Joaquin County Council of Governments (COG), hired the transportation planning firm of Arthur Bauer &Associates, Inc. to evaluate the long-term transit needs in the City of Lodi.

The bottom line of the study is a recommendation that the City develop fixed route service as an adjunct to the present demand response service.

The report gives a set of short and long-term steps to fully implement their recommendations. The final chapter of the report outlines a financial and capital plan utilizing Urban Mass Transportation Administration (UMTA) funds as well as Transportation Development Act (TDA) funds.

It is suggested this plan be presented to the City Council at a 'Shirtsleeve Session." Before that date, copies should be forwarded to the Ad Hoc Transportation Committee and to the Chamber of Commerce Government and Transportation Review Committee so those organizations can provide input and comment as the Council considers these recommendations.

A *copy* of the report is on file in the office of the City Clerk.

FUNDING: None required

Respectfully submitted,

Jerry L. Glenn
Assistant City Manager

JLG:br

CCCOM572/TXTA.07A

APPROVED: Thos. A. Peterson
THOMAS A. PETERSON
City Manager

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CITY OF LODI TRANSIT NEEDS ASSESSMENT AND SYSTEM PLAN

Volume I

Prepared for

City of Lodi and

San Joaquin County Council of Governments

Prepared by

Arthur Bauer & Associates, Inc.

in association with

Meta Information Services

The preparation of this report has been financed, in part, through a Technical Studios Grant from the U.S. Department of Transportation, Urban Mass Transportation Administration (UMTA), under Section 8 of *tho* Urban Mass Transportation *Act* of 1964, as amended.

August 3,1992

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Introduction, Summary of Rndings, and Recommendations

The San Joaquin County Council of Governments (COG). working in conjunction with the City of Lodi, has retained Arthur Bauer & Associates, Inc. and Meta Information Services to prepare a transit needs assessment for the City of Lodi. The purpose of the assessment is to:

- Conduct an assessment of the City's existing and near-tern transit needs;
- Evaluate the City's ability to respond to these needs; and based on this analysis.
- Prepare a final report with specific recommendations and an implementation schedule for system improvements.

Tasks m performing this study included gathering data describing the existing transit system, conducting both community and on-board *transit* surveys, developing a set of system goals and objectives, evaluating short-term capital and operating costs, and preparing a set of recommendations and an implementation schedule for transit system improvements

Material m this assessment draws upon land use, population, employment, and housing data obtained from city and county planning documents and from conversations with staff from Lodi Public Transit, *the* City Managers Office, and the city planning department. Information on existing transit service was obtained from a review of the *City of Lodi's Five Year Transit Plan: 1985-1989*, the COG's annual *Analysis and Determination of Unmet Transit* Needs *(FY 1991-1992)*, and from other documentation provided by the City of Lodi and the COG.

TRANSIT SYSTEM ISSUES

By providing convenient. reliable. and affordable transit service. Lodi Public Transit, a demand-type service, has been successful in meeting the transit needs of Lodi residents, particularly the elderly and handicapped. It is dear. however. that with population growth and economic development, the existing system sometimes has difficulty in meeting its service objectives. In addition. based on testimony presented through the annual transit needs hearing process conducted by the city and the COG. it is evident that a change is also occurring in the transit needs of people using the system. Increased service hours. transit service to the county hospital and courthouse in Stockton. the establishment of fixed mute service, and the provision of intercity service between Lodi and Stockton have been suggested.

Support for increased transit service in Lodi may reflect the general level of public support towards transit found at the county, state, and federal level. This support has been demonstrated several different ways. Measure K, adopted by San Joaquin County voters in November of 1990, raised the county sales tax one-half cent to finance transit and other transportation improvements in the county over the next 20 years On the state level, voter approval of Propositions 108.111, and 116 in June of 1990 also provided substantial increases in funding available for transit and highway improvements, local road and street repairs, and congestion relief projects. Finally, recent congressional passage of the Intermodal Surface Transportation Efficiency Act provides for a significant increase in federal funding for transit over the next six years.

Passage of Propositions 108 and 111 also triggered new state requirements for reducing automobile congestion in urban areas. San Joaquin County and other counties with urbanized areas with greater than 50,000 people were required to prepare congestion management programs that rely, in part, on the use of transit for improving overall mobility.

Finally, requirements under the California Clean Air Act and the federal Clean Air Act Amendments of 1990 encourage the development of transit as a method for reducing regulated air pollutants. These requirements also have the effect of helping decrease traffic congestion and improving transportation system efficiency.

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Finally, requirements under the California Clean Air Act and the federal Clean Air Act Amendments of 1990 encourage the development of transit as a method for reducing regulated air pollutants. These requirements also have the effect of helping decrease traffic congestion and improving transportation system efficiency.

These circumstances establish a framework for transit planning that includes the following themes:

- Actions must be taken that will contribute to the improvement of transit service in the City of Lodi;
- On a local and regional level, actions must be taken that will contribute to the improvement of regional air quality;
- Land use planning must be linked to transportation. e.g., the demand for travel generated by new development must be consistent with the supply of transportation facilities and services; and
- Management of traffic must be done to ensure that there is no further degradation of operating levels of service on the Street and road system during peak travel hours.

Although responding to these themes is not solely the responsibility of the transit sector and does require the development of a coordinated transportation system response, the purpose of this assessment and plan is to evaluate Lodi Public Transit and its future role in providing transit service in Lodi.

REPORT ORGANIZATION

The report is organized into seven sections. The remainder of this first section provides a summary of study findings and recommendations for implementation of transit system improvements over the next five years. Section Two describes the existing system, its organizational structure and operating history. Information is also included that provides the reader with some summary geographic and demographic characteristics of the Lodi area.

Section Three describes the system's goals and objectives and performance standards. Where appropriate, reference is made to the section of the Plan that discusses the particular performance standards.

The fourth section contains an evaluation of the service program and opetations. Specific operational areas discussed include transit system management and organization, service planning. personnel management and training financial planning and control, and marketing and public relations.

Section Five describes the results of the on-board and community surveys conducted as part of the transit assessment. A comparison of the two data sets is provided along with some conclusions about public attitudes towards transit in the City of Lodi.

Section Six contains the recommended five-year operating plan and implementation schedule for the system. Also discussed are federal statutory and regulatory requirements for transit system compliance with the Americans With Disabilities Act.

The last section, Section Seven, contains the recommended financial and capital plan for the five-year planning period. Included is a year-by-year capital program listing the purchases and projects needed for operation of the system. A discussion and justification for each project listed is included. Revenue sources including income fromthe farebox and other sources are described and projected for the planning period.

Included in the Appendix is detailed information on the two surveys undertaken as pan of the transit assessment.

FINDINGS

- Between 1970 and 1990 the city's population grew by 81 percent and is expected to grow by another 47.5 percent between 1990 and the year 2010. Housing and employment will also increase significantly during the next twenty years.

- Lodi Public Transit ridership has increased from nearly 56,400 to 86,600 between 1982 and 1991. Average ridership is approximately

260 people per day, with 80 percent of the passengers either elderly or handicapped.

- Lodi Taxi operates 24 hours a day seven days a week. Between July 1990 and June 30, 1991, the taxi company carried 18,600 people.

- Specific transit system goals and objectives include (I) meeting the transit needs of all city residents; (2) providing for efficient and cost-effective transit service; (3) maximize management and operational resources; (4) secure stable sources of funding; (5) increase ridership by fostering community support for the transit system; and (6) ensure that the service operates with the highest level of reliability and customer appeal.

- Between FY 82-83 and FY 90-91, the transit system achieved an average farebox recovery rate of 17.8 percent, a rate well above the ten percent minimum required by state law.

- The city has a goal of having passengers picked up within 45 minutes after they call the dispatcher. However. when there is heavy demand for transit service (i.e., when calls exceed 300 a day), it can become difficult for the system to meet this goal.

- Due to concern about overburdening the transit system, neither the city nor the operator has publicized availability of the service. Even with the absence of a marketing program, passenger ridership continua to increase.

- In comparing the on-board and community survey results, on-board respondents rated Lodi's transit system much higher than telephone respondents. It is not surprising that people who ride the transit

system are more favorable than the general public, many of whom do not use transit.

- Both groups expressed strong support for establishing Sunday service. In addition, there is greater community support for fixed route service than found among existing transit users.

RECOMMENDATIONS

Lodi Public Transit should begin a three phase gradual program for implementing both demand-response and fixed route transit service for Lodi residents. Implemented over a five year period. the phased program will consist of the following elements:

- **Phase I - Develop/Implement Transition Strategy,** July 1992 through June 1994. This phase will consist of acquiring larger vehicles, improving the existing dispatch system hiring additional personnel, initiating Sunday and passenger reservation/subscription service, purchasing an automated data reporting system, securing FTA Section 9 funding, and preparing a transit system marketing plan. The principal service goal is to reduce passenger wait time from 45 to no longer than 30 minutes.

- **Phase II - Prepare An Operational Plan, July 1993 through June 1994.** The plan will include details on proposed fixed routes, scheduling and equipment requirements, farebox structure, estimates of capital and operating costs, marketing and promotion. and how fixed route service will operate. The plan should also discuss how best to integrate the fixed route and demand-response transit services.

- Phase III - Implement Fixed Route and Demand-Response Service, July 1994. The fixed route service will consist of six vehicles

operating on three routes. Lodi Public Transit will need to closely monitor both fued route and demand-responseridership and system costs.

SECTION 2

SECTION 2

Current Service Characteristics

This section describes public transit service provided in the City of Lodi. Specific issues discussed indude the operation of Lodi Public Transit, its major transit destinations and ridership. fare structure. and system maintenance requirements. In addition. the City of Lodi is served by Lodi Taxi. which is also described in this section.

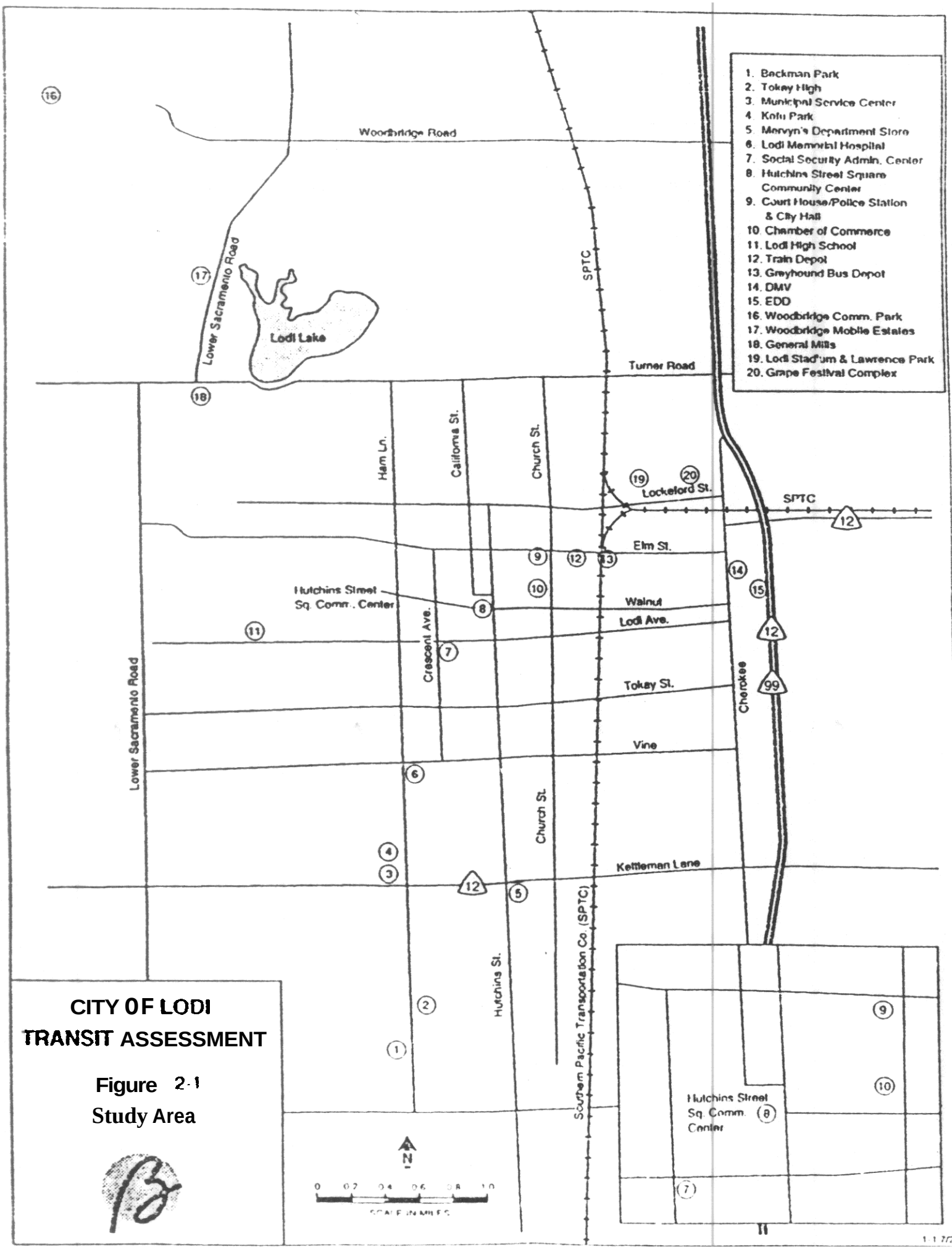
LODI PUBLIC TRANSIT

Lodi Public Transit. a demand-responsive type service sometimes referred to as Dial-A-Ride. currently consists of five full-size wagons, three sedans, and two wheelchair-accessible vans that are owned by the city and operated by Lodi Cab Company. Each vehicle can comfortably accommodate four to five passengers.

Service Area

The transit system service area consists of the City of Lodi, plus the unincorporated areas of Woodbridge, the Arbor Mobile Home Park in Acampo, and the Freeway Mobile Home Park located south of the Lodi City limits. Service to this unincorporated area is provided under a contractual arrangement between Lodi and San Joaquin County. Added together. the service area is approximately 18.5 square miles in size.

As shown in Figure 2-1, the city is served by a grid pattern street system. Major north-south roadways include Lower Sacramento Road, Ham Lane. Hutchins Street, Church Street, Stockton Street, Central Avenue, Cherokee Lane/B-99, and Slate Route 99. Major east-west facilities indude Turner Road, Lockeford Street, Elm Street, Pine Street, Lodi Avenue, Kettleman Lane (State Route 12). and Harney Lane. Kettleman Lane provides regional access to and from the west.



CITY OF LODI
TRANSIT ASSESSMENT

Figure 2-1
Study Area

Area Population, Housing and Employment

Between 1970 and 1990 the city's population grew nearly 81 percent and is expected to grow by another 47.5 percent between 1990 and 2010. Significant increases in housing and the number of jobs in Lodi are also anticipated during the next 20 years. Table 2-1 below illustrates actual and projected growth and development between 1970 and 2010 for the city.

Table 2-1

Growth and Development In the City of Lodi, Actual and Projected: 1970 - 2010

Year	Population	Housing Units	Employment
1970	28,691	10,333	Unavailable
1980	35,221	14,811	15,096
1990	51,874	19,261	19,136
2000	62789	23,479	24,258
2010	76,539	28,621	30,747

Source: City of Lodi General Plan and the San Joaquin County Council of Governments, 1992.

principal industries in the study area include agriculture, food processing, health services, and retail. Major employers include General Mills (900 employees); Lodi Unified School District (2,200); Pacific Coast Producers (300 full-time and 1,500 seasonal); and Lodi Memorial Hospital (650).

Major Transit Destinations

Lodi Public Transit currently operates Monday through Friday from 7 a.m. to 7 p.m. and on Saturdays between 9 a.m. and 5 p.m. Based on discussions with city staff and a review of ridership logs indications are that major travel destinations in the city indude Hutchins Street Square. downtown Lodi, Lodi Memorial Hospital, several area grocery stores (Raleys, Frys, and Safeway). the Vineyard shopping center on Kettleman Lane, Mervyn's Department Store. and Loel Center.

Organizational Structure

Lodi Public Transit is operated under a contract between the City of Lodi and Lodi Cab Company, a private transportation provider, located at 510 East Lodi Avenue in Lodi. Overall management of the contract is the responsibility of the Assistant City Manager while day-to-day operation of the transit service is provided by the taxi company. The city sets policy, conducts planning, and handles financial matters. The operator is responsible for hiring and training all operating personnel and for supervision of daiiy operations. The city owns and maintains the vehicles. The contract between the city and the taxi company requires that all normal operating expenses, including fuel, insurance, and maintenance costs be borne by the taxi company.

System Ridership

As shown in Table 2-2, 90 percent of the people who use the system are elderly or handicapped. In addition, over 95 percent of the people who ride Lodi Public Transit are people travelling to and from destinations within the city limits as illustrated in Table 2-3.

Transit system ridership has increased from 56,389 to 85,343 during a nine year period between Fiscal Year (FY) 82-83 and FY 90-91, a 513 percent increase. Average daily ridership is 260 passengers (Saturday included in this calculation). Vehicle service hours, the number of hours the system has operated over a 12-month period, has increased by 71.5 percent, from 9,448 to 16.200 over the Same timeframe.

There was also growth in the total number of revenue service miles, or the total number of miles traveled by a vehicle used for public transportation for which a fare is collected. Between FY 82-83 and FY 91-92, revenue service miles increased from 97,529 to 189,200 per year. a 93.9 percent increase over the ten year period. Table 2-4 shows the changes in these three transit system parameters.

Table 2 4

Lodi Public Transit Operating Characteristics
FY 82-83 Through FY 91-92

Fiscal Year •	Number of Passengers	Vehicle Service Hours	Revenue Service Miles
82-83	56.389	Unavailable	97,529
83-84	62.812	9.448	106.140
84-85	60,238	9,342	107.069
85-86	71.599	9.042	107.971
86-87	74,771	11299	136.490
87-88	76.207	12,000	140.069
88-89	70.842	12.639	141.767
89-90	74538	13,580	156,104
90-91	81,130	14.930	178,488
91-92	86,600	16.200	189.200

• FY 82 through 90 are actual; FY 91-92 is projected by the city.

Source: City of Lodi Transit System Performance Audits. June 1986 and June 1989. and the April 1992 COG draft publication entitled *Analysis and Determination of Unmet Transit Needs for Fiscal Year 1992-93.*

SECTION 3

SECTION 3

System Goals and Objectives

A number of program issues ultimately will influence the provision of transit service in the city. These issues include planning service demand, funding, and institutional issues. This portion of the report describes these issues and creates the framework for the development of transit system goals and objectives.

PLANNING ISSUES

Planning issues in a developing area are critical to the performance of transit service over time because the factors underlying growth will determine whether transit service in Lodi should evolve from a demand-responsive type service to a fixed route transit service. The growth factors are population and land use, e.g., mix and location of housing and employment. Other planning related factors include air quality and congestion management which link both land use planning and transportation.

Demographics

As described in the last section, the city's population is expected to grow 475 percent between 1990 and 2010. The city also anticipates significant increases in housing and employment, with the number of housing units increasing by 48.6 percent and the number of jobs increasing by 60.7 percent over the next 20 years.

Local Land Use

In April of 1987 the City of Lodi began its process for updating the city's general plan. During the following year the city council, planning commission, and the general public considered three different planning options which were evaluated for their impacts on land use, housing population.

employment. public services, and transportation. As a result of this analysis the city council in March of 1989 selected a land use plan calling for a 2.0 percent (compounded) limit on growth which is to be implemented through the approval of a limited number of residential (both single and multi-family) building permits each year.

Air Quality

While air quality has emerged as a significant issue. :he response to the concern provides both opportunities and constraints. The constraints in the extreme may involve curtailment of development in non-attainment areas. On the other hand. responding to the problem of substandard air quality presents the City of Lodi with an opportunity to maximize the benefit of public transit.

Responsibility for implementing an air quality program, which is required by law, rests with the San Joaquin Valley Unified Air Pollution Control District. The District includes all of the San Joaquin Valley Air Basin and represents nearly 28 million residents living in San Joaquin, Stanislaus, Merced, Madera, Tulare, Kings, Fresno, and Kern Counties.

Under federal and state law, the air pollution control district must adopt a program that has a heavy transportation component, including the following:

- Implement reasonably available transportation control measures;
- Establish an indirect source control program;
- Develop public education programs to promote actions to reduce emissions from transportation and areawide sources;
- Develop agreements with implementing agencies; and
- Establish monitoring and compliance procedures.

Compliance with air quality requirements may present the opportunity to link long range transit development with land development.

Congestion Management

In November of 1991, the San Joaquin County Council of Governments adopted a Congestion Management Program (CMP) for San Joaquin County. The CMP is designed to reduce automobile congestion by (a) coordinating land use, air quality, and transportation planning within the county, and (b) integrating local, regional. and state planning policies. One way of reducing congestion is by encouraging the use of transit as a transportation alternative. As a result, the CMP describes specific transit standards and sets minimum performance requirements :hat are to be implemented by transit operators in the county.

SERVICE DEMAND ISSUES

There are several service demand issues which should be considered: compliance with the Americans with Disabilities Act, future establishment of fixed-route transit service, and the development of inter-city transit service between Lodi and the City of Stockton. Each of these issues is discussed below.

Compliance With ADA

In 1990 congress enacted the Americans With Disabilities Act (ADA) which is designed to provide equal access for persons with disabilities to transportation, public accommodations, public services, and telecommunications. The U.S. Department of Transportation has issued regulations to implement the transportation element of the ADA. These regulations affect all transportation providers, whether or not they receive federal funding. Briefly. the regulations require the following:

- Demand responsive transit systems must be physically accessible;

- Accessible features of vehicles must be maintained in working order and wheelchair lifts must be tested on a regular basis;

- All employees who are in contact with disabled individuals must be trained to operate vehicle equipment safely;

- All information services must be accessible to vision and hearing impaired individuals; and

- Public transportation programs utilizing existing facilities must be accessible when viewed in their entirety.

Similar requirements exist for fixed route transit service. As mentioned earlier. only two of Lodi Public Transit's vehicles are wheelchair equipped at the present time. However. all contractor staff regularly receive training for use of wheelchair ramps and other vehicle equipment. Due to the importance of this new law. Lodi Public Transit will need to continue monitoring the implementation of ADA requirements.

Fixed Route Service

During the last several years a number of people living and working in Lodi have suggested the need for establishing fixed route transit service for the city. In 1990 a group of social service organizations and the city developed and circulated a transit survey. The survey was designed to determine the transit needs of Lodi residents. According to the COG's *Analysis and Determination of Unmet Transit Needs for FY 91-92.* the preliminary survey results indicated that a majority of respondents who use Lodi Public Transit were satisfied with transit services but that 55 percent of the respondents would use a fixed route bus system if it were available. City staff and members of the city council are concerned, however, that insufficient funds exist to support a fixed route system.

Inter-city Transit Service

Currently. San Joaquin County provides demand-response inter-city transit service through its County Area Transit (CAT) system. CAT is primarily used by transportation-disadvantaged people for travel between cities to obtain essential goods and services such as government services or access to medical facilities.

During the last several years, a number of Lodi residents have expressed interest in having inter-city transit service established for travel to Stockton and Sacramento. With adoption of the Measure K Program (see discussion below), the COG has inititated an effort to prepare a county-wide transit plan that evaluates intercity and inter-regional transit needs. Should this type of service be organized linking Lodi with neighboring cities Lodi Public Transit riders could potentially travel from the city to Stockton, Sacramento. and other area communities.

** DING ISSUES

Funding is a complex arena of activity with certain sources as a given and others problematic Each source of revenue–TDA, state funds, and local sales tax–has its own terms and conditions governing how it is assessed and used. The issue ultimately becomes how to position the City of Lodi to maximize the use of its revenues. Two principal revenue sources are discussed below TDA and farebox revenues.

Funds for Lodi Public Transit may also be available under the Federal Transit Administration's Section 9 Program. Funds could also be available under San Joaquin County's Measure K program. Each of these funding sources is also discussed.

Transportation Development Act

The Transportation Development Act (TDA) is a local transportation funding source based upon a onequarter percent local sales tax This is one of the most stable sources of transportation funding for the City of Lodi. The first priority for these funds is to support public transit. The

funds may also be used to plan. construct, and maintain local streets and roads. These expenditures are allowed only if the regional transportation planning agency, the San Joaquin County Council of Governments. finds that there are no unmet transit needs that are reasonable to meet.

Late; amendments to the law established a farebox recovery requirement as the principal eligibility requirement for receiving TDA funds. Historically, the City of Lodi was required to maintain a minimum recovery ratio of ten percent from fares paid on the Lodi Public Transit system. This ratio has recently increased to 20 percent with the city being designated as an urban area following the 1990 Census (i.e., the city's population now exceeds 50,000 residents). Based on the census, the city has five years to achieve this 20 percent farebox recovery requirement.

Since FY 1983, the city has received approximately $7.1 million in TDA funds, approximately 18 percent of the total has been allocated for transit. Table 3-1 depicts this recent growth.

Table 3-1

TDA Allocations for the City of Lodi
FY 82-83 Through FY 90-91

Fiscal Year	Streets and Roads	Percent	Transit	Percent	Total
82-83	$743,433	94	$ 44,000	6	$787,433
83-84	521,485	92	44,000	8	565.485
84-85	664,793	91	68,080	9	732,873
85-86	676,565	88	90,425	12	766,930
86-87	543.929	79	143,000	21	686.929
87-88	557,701	76	179.805	24	737,506
88-89	687.966	77	201.260	23	889,226
89-90	717,599	74	248,813	26	966,472
90-91	788,988	75	262965	25	1.051,853
Totals	$5,902,459	82	$1,282,308	18	$7,184,767

Source: State Controllers Office

Farebox Revanues

As shown in Table 3-2, farebox revenues for Lodi Public Transit has steadily increased over time. For the nine year period between FY 82-83 and FY 90-91, annual farebox revenues have ranged from 531.029 to 543.750.

Available Federal Funding

The Federal Transit Administration makes available several formula grant programs for transit systems. Under the Section 9 program, the federal government makes available funds on a formula basis to all urbanized areas in the country. While the city has only recently become eligible for these funds. Lodi should work with the COG to apply for needed capital and operating assistance under this program These funds could constitute a significant long-term source of funding for the transit system. A more detailed description of federal and other funding opportunities is provided in Section 7 of this document.

Table 3-2

Farebox Revenues *for* Lodi Public Transit
FY 82-83 Through FY 90-91

Fiscal Year	Farebox Revenues	Fiscal Year	Farebox Revenues
82-83	$31.029	87-88	$44,000
83-84	37.052	95-89	41,265
84-85	34,823	89-90	40,500
85-86	44,405	90-91	43,750
86-81	46.467		

Source: State Controllers Office.

Measure K

In November of 1990. San Joaquin County voters approved an increase in the local sales tax to fund transportation improvements. The Local Transportation Improvement Program. or commonly referred to as Measure K, requires the Local Transportation Authority (the COG) to prepare and annually update a seven year Transit Plan for use in allocating sales tax revenues. Measure K also requires that the priority order for inter-city and elderly and handicapped transit funds will be as follows:

- Inter-city bus service between Stockton, Lodi, Manteca, Lathrop, Tracy, Escalon, and Ripon for all trip purposes;
- Capital purchases such as vehicles for providing transit service in all communities to the elderly, the handicapped, and the transportation disadvantaged; and
- Operating expenses for transit services to the elderly and the handicapped, and the transportation disadvantaged.

INSTITUTIONAL ISSUES

Two institutional issues have been identified: Lodi Public Transit's relationship with the COG for coordinating and improving transit planning for the city, and developing and implementing a marketing program.

Relationship With the COG

Since the COG serves as the primary transportation planning agency in San Joaquin County and plays a central role in the allocation of transportation funding. Lodi will want to continue working closely with COG staff in planning for future improvements to the city's transit system. COG staff can assist the city by identifying sources of transit funding and evaluating service delivery issues.

Transit System Marketing

To increase ridership and improve public acceptance of the transit system, Lodi Public Transit should prepare and implement a detailed marketing and promotion plan. The pl how. issues including the design and distribution of marketing materials and the implementation of advertising strategies and service improvements. Advertising may also provide an additional source of revenue for transit system activities.

TRANSIT SYSTEM GOALS AND OBJECTIVES

Based on the information reviewed and the analysis presented above, a set of sb transit system goals and objectives have been developed. As shown in Table 3-3, the six goals include the following:

- Meet the transit needs of all city residents;
- Provide for efficient and cost-effective transit service;
- Maximize resources available for the management and operation of Lodi Public Transit:
- Secure stable sources of funding;
- Foster community awareness and support for the Lodi Public Transit, with emphasis on increasing system ridership; and
- Ensure that the transit service operates as scheduled. and that all transit equipment has the highest level of reliability and customer appeal.

TABLE 3-3

Lodi Transit System Goals and Objectives

Goals	Objectives
1. Meet the transit needs of all city residents	A. Monitor and improve service as needed
	B. Insure equipment is compatible with requirements under the Americans With Disabilities Act (ADA)
	C. Develop cooperative agreements with other area transit providers
	D. Coordinate transit services with congestion management plans/ordinances/and regional transportation plan
2. Provide for efficient and cost-effective transit service	A. Maintain all vehicles in good working order
	B. Continue to provide training to Lodi Public Transit staff
	C. Achieve adequate staffing and equipment levels
	D. Develop and collect performance indicator data for Lodi Cab Company

Arthur Bauer & Associates, July 1992

TABLE 3-3 (Continued)

Lodi Transit System Goals and Objectives

Goals	Objectives
3. Maximize resources available for the management and operation of Lodi Public Transit	A. Increase farebox recovery from 10 to 20 percent by 1997
	B. Identify key areas (indicators) to monitor the performance of services
	C. Maximize productivity
	D. Develop and coordinate activities with other area transit providers and programs promoting ride-sharing, vanpooling, and use of Park & Ride lots
4. Secure stable sources of funding	A. Maximize the use of TDA revenues for transit system use
	B. Increase farebox recovery
	C. Obtain federal and other types of funding
	D. Develop advertising as a revenue source

Arthur Bauer & Associates, July 1992

TABLE 3 – 3 (Continued)

Lodi Transit System Goals and Objectives

Goals	Objectives
5. Foster communily awaroness and support for Lodi Public Transit, with emphasis on increasing ridership	A. Continuo to improve the scheduling and delivering of transit service
	B. Implement transit system marketing program
	C. Encourage transit system/community interaction
6. Ensure that the transit service operates as scheduled and that all transit equipment has the highest level of reliability and customer appeal	A. Continue to take stops to minimize wait limos
	B. Provide wockend transit service if cost-effective and ridership exists
	C. rovide fixed route transit service if cost–effective and ridership exists
	D. Maintain and strengthen working relationship with the COG for transit and financial planning

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ELEMENTS OF THE STRATEGIC FOCUS

In implementing the recommended set of transit system goals and objectives, Lodi Public Transit should incorporate the following elements into its planning process.

Planning and Service Demand Issues

- Expanding Lodi Public Transit's level of service should be linked to land use development. population growth, and the need to reduce automobile congestion and imprwe local air quality. Specific short. medium. and long-term activities should be identified to enable the city to adequately respond to rapid growth and development.

- As the population and the employment base grows, Lodi Public Transit should expand its service as needed.

Funding Issues

- As Lodi Public Transit develops an expanded program, its share of TDA funds will likely increase.

- Lodi Public Transit should initiate efforts to obtain Section 9 federal funding for capital improvements and operating assistance.

- Lodi Public Transit should continue its efforts to maximize farebox revenues.

Institutional Issues

- The transit system should maintain and strengthen its working relationship with the COG for transit system and financial planning.

- Lodi Public Transit should develop and implement a marketing plan designed to increase ridership and public acceptance of the transit system.

SECTION 4

SECTION 4

Evaluation of the Service Program

This section describes the operation of Lodi Public Transit and Lodi Taxi. discusses service improvement options. and evaluates the existing system against the system goals and objectives described in Section 3

PERFORMANCE DATA

Section 99246(d) of the California Public Utilities Code requires transit operators receiving state funding to monitor, at a minimum, five transit system performance indicators. These indicators include operating cost per passenger, operating cost per service hour, passengers per vehicle service hour, passengers per vehicle service mile. and vehicle services hours per employee. In addition. Section 99268 et seq. requires that the farebox recovery ratio be calculated annually so that an operator's eligibility for state funding can be determined. To remain eligible, Lodi Public Transit has until recentiy been required to achieve a farebox recovery rate of at least fen percent.

Table 4-1 shows the values calculated for the five performance measures and farebox recovery rate for Lodi Public Transit. Over a nine year period between FY 82-83 and FY 90-91. the transit system achieved an average farebox recovery rate of 17.8 percent. a rate well above the ten percent minimum required by state law.

The Lodi Taxi service. implemented in July of 1990, has an operating cost per passenger objective ratio of $2.17. The actual operating cost per passenger is not determinable as of June 30, 1991. Actual operating costs of the transit company was not available.

OPERATIONS ANALYSIS

In evaluating the operation of Lodi Public Transit. this section of the report discusses five operational areas. These areas include:

TABLE 4– 1

Performance Indicators for Lodi Public Transit

Performance Measures	FISCAL 'EAR 82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91
Operarlng Cost Per Passenger	$3 30	$3.40	$3 30	$3 30	$3 50	13.40	$3 40	$3.50	$3.40
Operating Cost Per Vehicle Servlce Hour	NA	22.60	21.50	25.80	22.90	21.80	18 90	19 60	18.90
Passengers Per Vehicle Service Mile	0.50	0.59	0 50	0.70	0.50	0.60	0 50	0.48	0.47
Passengers Per Vehicle Servlce Hour	NA	6.6	6 4	7.9	6.6	6.4	5 6	5.6	5.6
Vehicle Servlce Houn Per Employee	NA	1,575	1,334	1,292	1,412	1.488	1,149	1,234	1.059
Farebox Recovery Ratio	16.4%	17.4%	17.3%	19.0%	18.0%	18.6%	19.6%	18.9%	15.4%

NA = Information not available

Sources: Lodl Public Transit performance audits; data for FY 88–89 through FY 90–91 prodded by City of Lodl and State Controllers Office.

Arthur Bauer 6 Associates, July 1992

- Management and organization.
- Service planning.
- Personnel management and training;
- Financial planning and control, and
- Marketing and public relations

Each of these operational areas are described below

Management and Organization

As described earlier. Lodi Public Transit is operated under a contract between the City of Lodi and Lodi Cao Company. Overall management of the contract is the responsibility of the Assistant City Manager, while day-today operation of the transit service is provided by the taxi company. In addition, a 12-member citizen advisory transportation committee acts in an advisory capacity to the City Manager and City Council. The organizational structure of Lodi Public Transit is shown in Figure 4-1.

The operation of the transit system presently depends on 13 full-time and part-time employees whose titles and duties are as follows:

- Transit Manager is responsible for the overall administration of Lodi Public Transit and acts as the main liaison with the City of Lodi. The Transit Manager also supervises and coordinates the driver training program, inciuding certifications of General Public Paratransit Vehicle (GPPV) operators. and the daily responsibilities and activities of the drivers.

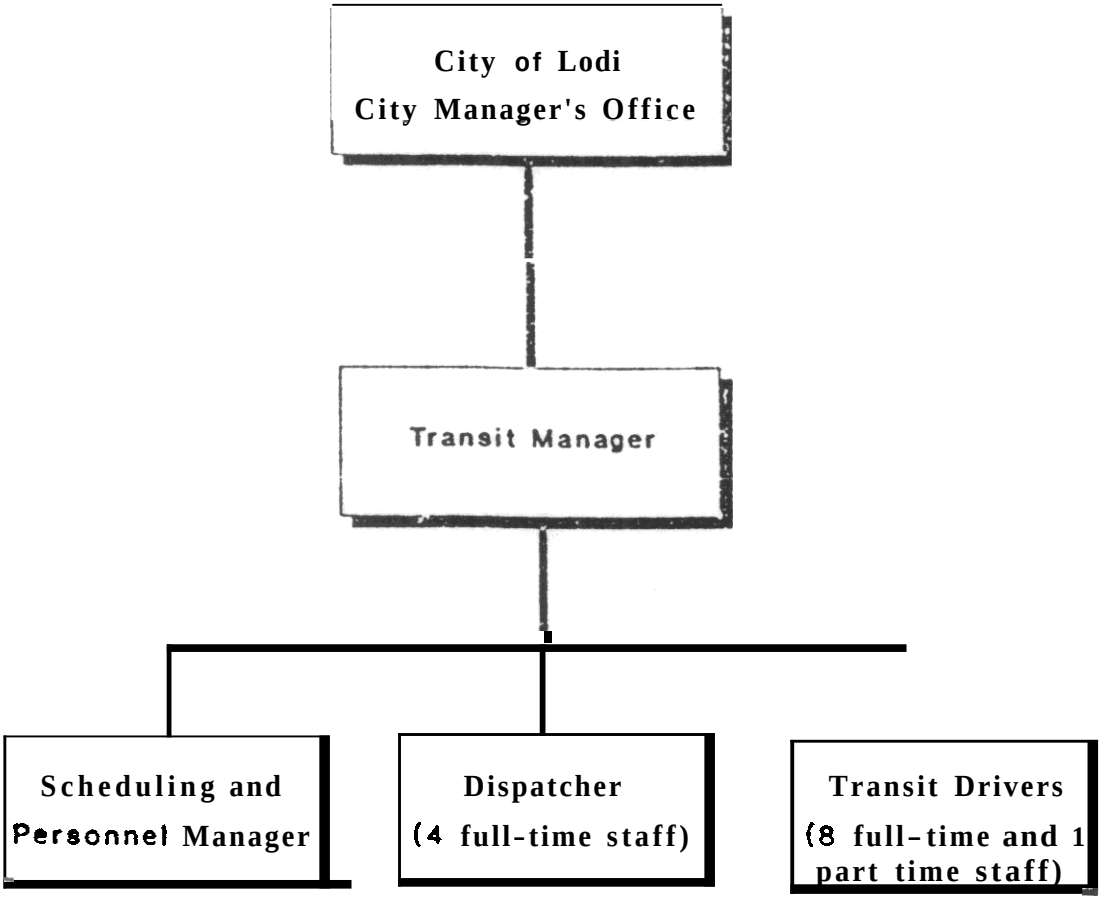

Figure **4-1**

Lodi Public Transit **Organization Chart**

- Scheduling and Personnel Manager is responsible for scheduling of drivers and other staff along with handling personnel matters.

- Transit Dispatcher is responsible for dispatching vehicles and taking passenger calls. The Dispatcher works from 7:00 a.m. to 7:00 p.m. Monday through Friday and from 9:00 to 5:00 on Saturdays. The Dispatcher reports directly to the Transit Manager.

- Transit Drivers are responsible for driving the vehicles and picking up and delivering passengers to their final destinations.

Service Planning

As described in Section 2, Lodi's population is expected to increase 47.5 percent between 1990 and the year 2010. The number of jobs are also expected to grow by as much as 61 percent over the next two decades. With rapid population growth and economic development, people will increasingly rely on Lodi's transit system for travel around the city.

A sampling of handwritten daily transit system log sheets (between July 1, 1991 and April 13.1992) revealed that most people (78 percent) use the system between 900 a.m. and 3:00 p.m. five days a week. Fifteen percent of the ridership occurs between 7:00 and 9:00 in the morning. Finally, ridership falls off significantly after 5:00 in the afternoon. A similar use pattern occurs during Saturday service as well.

Currently, the city has a goal of having passengers picked up within 45 minutes after they call the dispatcher. However in instances when there is heavy demand for transit service, it can become difficult for the system to meet this goal. For example, when passenger calls exceed 300 or more per day, or one call every 2.4 minutes, the dispatcher can become overloaded. This can adversely effect the transit system's level of service, slowing the response time and diminishing the public's opinion of the transit system.

When an overload situation occurs, the dispatcher informs people calling for transit service that thw may expect a delay in being picked up. As shown in Table 4-2, on a monthly average basis during FY 90-91, the transit system exceeded this threshold every month except during July, August. and September for its Monday through Friday service.

The daily log sheets also reveal that. on average, the system carries more than 300 people per day at least twice a week. This always occurs on a weekday when travel demand is highest. Based on the log sheets and from conversations with Lodi Public Transit staff. the amount of time needed for the system to return to normal (i.e., pick up passengers within 45 minutes) varies depending on the number of incoming telephone calls and the number of vehicles in service.

Even with this high demand, the transit service currently does a good job in responding to calls in a timely manner. A survey conducted by city staff during a two week period in November 1990 showed that only 145 people. or less than 5 percent out of a total of 3.126 people. using Lodi Public Transit were required to wait 45 minutes or longer for transit service. Of the 145, only 31 people waited longer than an hour.

While the existing transit service can be augmented with additional vehicles. drivers. and other staff, anticipated population growth and economic development requires that the City of Lodi should begin planning for the transition from just demand-response service to a combination of demand-response and fixed route service. During this transition period, the transit system should adopt a goal of reducing wait time to no longer than 30 minutes.

Personnel Management and Training

To comply with all California Highway Patrol and company requirements, Lodi Public Transit drivers receive a minimum of 40 hours of classroom and 20 hours of vehicle driving instruction before they are allowed to drive passengers. Training topics include vehicle operation and safety, use of vehicle equipment (e.g., wheelchair ramps/lifts and tiedowns), scheduling and dispatch, and first aid. In addition, each driver receives an additional 24 hours of training annually which typically covers new driving and licensing requirements, a review of first aid procedures. and new company procedures Finally. drivers are required to renew their state driving licenses every three

TABLE 4–2

Transit System Performance Statistics
Fiscal Yoar 90–91

Category/Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
TOTAL MILES DRIVEN	13,541	15,180	13,644	16,108	13,087	14,996	18.476	13,077	15,406	16,252	14,900	15,023	178,488
FUEL USED	1,267	1.366	1.374	1,446	1.308	1.325	1.239	1,231	1,196	1.039	1.308	1.266	15.467
SERVICE HOURS	1,109	1,258	1,149	1,374	1,201	1,204	1,240	1,141	1,205	1.309	1,541	1,401	14,930
SERVICE DAYS	25	27	24	27	25	25	25	23	26	26	26	25	304
MILES/TRIPS	2.11	2.11	2.16	2.13	1.95	2.14	2.20	2.00	2.15	1.88	2.07	2.24	2.09
MPO	10.52	11.11	9.93	11.12	10.83	11.32	13.30	10.82	12.86	15.64	10.89	11.69	11.54
TRIPS/SERVICE HRS	5.70	5.71	5.51	5.50	5.90	5.83	6.04	5.72	5.95	8.60	5.37	4.70	5.72
TRIPS/SERVICE DAY	256.68	266.11	263.75	279.93	263.W	280.60	299.64	263.78	275.77	332.38	277.12	268.W	280.66
TRIPS/DAY SAT	116.25	120.50	127.84	120.50	122.00	135.80	126.75	138.50	128.60	129.25	130.75	108.40	125.38
TRIPS/DAY NON–SAT	283.43	291.43	299.58	307.65	314.33	316.80	332.57	314.37	310.81	369.32	303.73	506.60	312.79
HRS/DAY	44.36	46.57	47.88	50.67	48.04	48.14	49.58	40.59	46.36	60.35	51.59	50.05	49.11
MILES PER SERVICE HOUR	12.21	12.07	11.87	11.73	11.56	12.48	13.29	11.47	12.78	12.42	11.11	10.72	11.05
MILES PER SERVICE DAY	541.64	562.P	566.50	596.52	555.48	599.84	659.04	568.57	592.54	625.08	575.W	600.92	587.13
PERCENT ELDERLY PASS.	90.45%	89.87%	90.02%	90.20%	91.76%	01.05%	90.47%	89.63%	87.20%	89.32%	88.74%	89.14%	89.80%
PERCENT NON–ELDERLY PASS	9.55%	10.33%	9.98%	9.80%	8.24%	8.95%	9.53%	10.37%	12.80%	10.68%	11.26%	10.86%	10.20%
PERCENT CITY TRIPS	05.84%	95.49%	95.55%	94.72%	95.54%	95.05%	95.51%	95.19%	94.88%	95.51%	05.84%	06.11%	95.42%
PERCENT COUNTY TRIPS	4.34%	4.51%	4.45%	5.26%	4.46%	4.05%	4.40%	4.61%	5.12%	4.49%	4.16%	3.89%	4.58%

Source: City of Lodi

Arthur Bauer & Associates, July 1992

years. Lodi Public Transit regularly participates in driving awareness and other training programs sponsored by the Lodi Police Department.

Financial Planning and Control

The Transit Manager for Lodi Public Transit has responsibility for the financial planning and control functions of the transit system. This includes estimating and monitoring capital and operating costs. collecting passenger ridership data, and complying with all city reporting requirements.

The increase in Lodi Public Transit's ridership and overall growth as a transit provider is reflected through the data obtained from its financial records. For instance. for the nine year period from FY 82-83 through FY 90-91, Lodi Public Transit's operating expenditures increased from $189,063 to $372,557, or 97 percent. Over the same period, TDA revenues increased from $44,000 to $267,930, and fare revenue from $31.029 to $43,576, respectively. Table 4-3 provides a financial summary for Lodi Public Transit between FY 82-83 and FY 90-91.

The City of Lodi received approximately $1 million in TDA assistance in FY 90-91. Of this total, 27 p e m t or nearly $268,000 was allocated to Lodi Public Transit. Under state law, use of TDA funds for transit assistance has first priority over transportation planning and street and road projects. Consequently. as Lodi Public Transit develops an expanded program of transit facilities, equipment, and services, its share of TDA will in all likelihood grow.

Most of the money received by the city is funding provided under Article 4 of the Transportation Development Act. The law requires that a performance audit be conducted for activities using these funds. A smaller amount of money is provided under Article 8. These funds are used to subsidize Lodi Taxi and are not subject to the auditing requirements. However. to better evaluate the performance of the taxi service, the city should require the contractor to collect and publish annual performance data.

In the past Lodi Public Transit was eligible, but never applied for either Section 16(b)(2) or Section 18 transit assistance from the federal government. With a population of over 50.000. the city is no

TABLE 4 – 2

Transit System Performance Statistics
Fiscal Year 90 – 91

Category/Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
TOTAL MILES DRIVEN	13.541	15,180	13,644	16,106	13,687	14,996	16,476	13,077	15,406	16.252	14,900	15.023	178,488
FUEL USED	1.207	1,366	1,374	1,446	1.306	1,325	1.239	1,231	1,198	1.039	1,368	1.208	15.467
SERVICE HOURS	1,109	1.256	1,149	1,374	1,201	1,204	1,240	1,141	1,205	1,309	1.341	1,401	14,930
SERVICE DAYS	25	27	24	27	25	25	25	23	26	26	26	25	304
MILES/TRIPS	2.11	2.11	2.18	2.13	1.96	2.14	2.20	2.00	2.15	1.88	2 07	2.24	2.09
MPO	10.52	11.11	9.93	11.12	10.63	11.32	13.30	10.62	12.86	15.64	10.89	11.69	11.54
TRIPS/SERVICE HRS	5.79	5.71	5.51	5.50	5.90	5.83	6.04	5.72	s.95	6.60	5.37	4.79	5.72
TRIPS/SERVICE DAY	266.68	266.11	263.75	279.93	283.56	280.60	299.64	283.78	275.77	332.38	277.12	268.56	280.66
TRIPS/DAY SAT	116.25	120.50	127.60	120.50	122.00	135.80	126.75	136.50	128.60	129.25	130.75	108.40	125.58
TRIPS/DAY NON – SAT	283.43	291.43	299.56	307.65	314.33	316.80	332.57	314.37	310.81	369.32	303.73	306.60	312.79
HRS/DAY	44.36	46.57	47.88	50.87	48.04	46.14	49.58	49.59	46.36	50.35	51.59	56.05	49.11
MILES PER SERVICE HOUR	12.21	12.07	11.87	11.73	11.56	12.45	13.29	11.47	12.78	12.42	11.11	10.72	11.95
MILES PER SERVICE DAY	541.64	562.22	688.50	596.52	555.48	599.84	659.04	566.57	582.54	625.06	573.06	600.92	587.13
PERCENT ELDERLY PASS.	90.45%	80.07%	90.02%	90.20%	91.78%	91.05%	90.47%	69.63%	87.20%	89.32%	68.74%	89.14%	89.80%
PERCENT NON – ELDERLY PASS	9.55%	10.53%	9.98%	9.80%	8.24%	8.95%	9.55%	10.37%	12.80%	10.68%	11.26%	10.86%	10.20%
PERCENT CITY TRIPS	95.64%	95.49%	95.55%	94.72%	95.54%	95.05%	95.51%	95.19%	94.88%	95.51%	95.84%	96.11%	95.42%
PERCENT COUNTY TRIPS	4.36%	4.51%	4.45%	5.28%	4.46%	4.95%	4.49%	4.81%	5.12%	4.49%	4.16%	3.89%	4.58%

Source: City of Lodi

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longer eligible for Section 18 funds but may apply for Section 9 monies for needed capital and operating assistance.

Marketing and Public Retations

Since Lodi Public Transit is now operating at close to capacity, neither the city nor :he operator has publicized availability of the service. Even with the absence of a marketing program, ridership has continued to increase *over* time, from 56.400 in FY 1982-83 to 79,500 in FY 90-91. An evaluation matrix summarizing Lodi Public Transit performance is shown in Table 4-4.

TAOLE 4 – 3

Financial Summary for Lodi Public Transit
FY 1982–83 Through FY 90–91

Categories	FISCAL YEAR 82–83	83–84	84–85	85–86	86–87	87–88	88–89	89–90	90–91
Revenues									
Farebox Receipts	$31,029	$37,082	$34,823	$44,40	$46,467	$48,25(	$41,265	t39.313	$43.576
TDA Funding	44,000	65,519	54,539	40,00(	197,43	202,12	201,260	242.518	267,930
State Transit Assistance	99,427	67,641	88,534	161,90	20,724	56	0	0	5,221
Other	0	607	0	27	22(	2,19	0	12,121	25,833
TOTALS	$174,456	$170,849	$177,896	$246,58	$264,846	$253,137	5242525	$293,952	$342,560
Expenditures									
Operations	$189,063	$213,450	$201,202	$233,336	$258,723	$259,185	$285,278	$234,193	$288,831
Vehicle Maintenance	NA	NA	NA	NA	NA	' A	NA	11,264	20,200
General Administration	NA	NA	NA	NA	NA	NA	NA	48,495	33,529
Depreciation	NA	NA	NA	NA	NA	NA	NA	24,957	29,997
TOTALS	$189,063	$213,450	$201,202	$233,336	$258,723	$259,185	$285,278	$318,909	$372,557
Net Transit Income or Loss	($14,607)	($42,601)	($23,306)	$13,249	$6,123	($6,048	($42,753)	($24,957)	($29,997)
Recovery Ratio	16.4%	17.4%	17.3%	13.0%	18.0%	18 6%	19.6%	18.9%	15.4%

NA = Information not available

Sources: Lodi Public Transit performance audits; data for FY 88–89 through FY 90–91 from City of Lodi Dial–A–Ride financial audit, 1992.

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TABLE 4–4

Performance Evaluation Matrix

Objectives	Management and Organization	Service Planning	Personnel Management and Training	Financial Planning and Control	Marketing and Public Relations
1. Meet the Needs of Residents	Survey data confirms that existing transit service is responsive to communiy needs	Survey data confirms that a large segment of the community favors Sunday transit service.	N/A	N/A	N/A
2. Provide Efficient Transit Service	Staff consists of 13 full– and part–time staff	Existing service has difficulty in meeting goal of picking up passengers within 45 minutes when service is extremely bury	Current training program meets or exceeds state training requirements; participates in driver training programs offered by Lod Police Department	Existing transit system meets minimum ten percent farebox recovery requirements	N/A
3. Maximize Resources for Management and Operations	City and transit system staff constantly monitor efficiency of Lodi Public Transit	Service planning currently prodded by city and COG staff; transit system should regularly survey transit users to identify means for improving service	Transit system contractor provides for continuing education of drivers and other staff	Transit system currently relies on farebox and TDA revenues for funding	N/A
4. Secure Stable Sources of Funding	System currently relies on farebox revenues, STA, and TDA funds for financing operations	City, transit system, and COG staff work together to project future revenue needs/estimates	N/A	City should apply for federal (Sec. 9) funds to finance future system improvements	System promotion could increase ridership thereby increasing farebox revenue
5. Foster Community Awareness	N/A	Information on public transit concerns obtained through unmet needs hearing process and citizens advisory comm.	N/A	N/A	No existing marketing program in place due to concern about overloading system
6. Ensure that the Transit System Operates as Scheduled	City and transit system staff constantly monitor efficiency of Lod Public Transit	Improvements to dispatch system would help reduce transit delays; near–term system objective should be to reduce wait–time to no longer than 30 minutes	Contractor is required to provide updated driver training as specified by law	Performance and financial audits conducted regularly to monitor efficiency of transit system operations	N/A

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SECTION **5**

SECTION 5

Analysis of the On-Board and Community Survey Results

This section describes the results of on-board and community surveys concerning the use of transit in the City of Lodi. Each survey had the same set of objectives: determining the public's (1) ability and willingness to use transit; (2) its perception of the existing transit system; (3) its preference for the type of service it would support; (4) frequency of use; (5) its concern about any unmet transit needs that exist within the community; and (6) potential transit destinations.

Each survey and its results are summarized below. Full cross-tabulations and frequencies of responses, in total. are included in the Appendix.

ON-BOARD SURVEY

In consultation with city and COG staff, an on-board survey was prepared consisting of 31 questions. with 23 structured as multiple choice and the remaining 8 requiring written answers. Depending on language preference. both English and Spanish versions of the questionnaire were available for distribution to respondents, Copies of the questionnaire can be found in the appendix.

The survey was administered on Wednesday March 18 and Saturday March 21. 1992 Two ABA staff members distributed and collected questionnaires on different Lodi Public Transit vehicles between 830 a.m. and 6:00 p.m. One-hundred six surveys were collected from a total of 405 people. or 26.2 percent of the people who used the transit system over the two day period.

Several factors influenced the data collection process. First, some respondents felt the survey was too long and consequently did not have sufficient time to complete the survey prior to reaching their travel destination. Second, a few respondents objected to participating in the survey due to health reasons (e.g., poor eye sight) or because they felt some of the questions requested personal information.

With this information as background. the remaining sections describe sample characteristics. the survey results. a comparison of on-board results with the previously conducted telephone survey. and the survey conclusions. Unless otherwise noted, figures cited in this section reflect adjusted frequencies (excluding those refusing to answer.) In addition, responses may not total 100 percent due to multiple responses. rounding. and other factors. Absolute frequencies showing all percentages can be found in the frequency tables included in the full statistical report.

To better interpret the results of some questions, we developed an index value for certain items. First, response categories to the question were identified as "positive,. "negative," or *neutral.' The actual calculation of the index involved subtracting the negative percentage from the positive percentage, then adding 100. Responses considered to be neutral were not scored when calculating index values. Following this formula, the index would yield a potential range from 0 (all negative) to 200 (all positive). The theoretical middle of the index is 100.

Sample Characteristics

Passengers who rode Lodi Public Transit on March 18 and March 21 comprised the survey sample. Tabk 5-1 shows the percentage distribution of respondents who participated in the survey over the two day period of time.

TABLE 5-1

Day and Time of Travel lor On-Board Lodi Public Transit Respondents

Day/Time	Percent
Wednesday, March 18	50.0
Saturday, March 21	50.0
Before 11:00 a.m.	32.1
11:00 a.m. to 1:00 p.m.	27.4
After 1:00 p.m.	40.6

Of those who responded. women comprised 83 percent of the respondents with men representing the remaining 17 percent. The age of respondents was closely divided. with 3 percent of the respondents 24 years of age or younger, 13 percent between 25 and 44, and 18 percent of the group between 45 and 64. Another 66 percent said they were over 65 years of age.

Survey Results

The survey results presented below are categorized by topic. These categories include public attitudes concerning:

- Ability and willingness to use transit:
- Perception of the existing transit system;
- Preference for the type of service it would support;
- Frequency of use;
- Public concern about unmet transit needs, and
- Potential travel destinations.

Ability and Willingness to Use Transit

During the two day survey period, over 60 percent of the respondents had Lodi Public Transit pick them up at home. Smaller groups of respondents were picked up from downtown Lodi (live pacent). Mervyn's (four percent), Loel Center (two percent). and other points of origin (18 percent). As to their travel destinations, the respondents used the system to travel home (45 percent). to downtown Lodi (eight percent). Lodi Memorial Hospital (six percent), or to other places (21 percent).

In addition to Lodi Public Transit, the City of Lodi relies on local taxi service to serve local transit needs. Respondents were asked how often they use the taxi service. A large majority, 70 percent. said that they do not use the taxi service. Twenty percent said they use the taxi service on a "less than weekly" basis and another 4 percent indicated they use the taxi at least once a week. In addition, 52 percent rated the response time as either good or excellent while 19 percent said it was

fair. In contrast. 7 percent said the response time was poor. More than one out of five said they had no opinion.

Public Perceptions

All respondents were asked to rate Lodi's transit service as excellent. good. fair. or poor. A large majority (86 percent) considered service to be either good or excellent. Eleven percent of the respondents rated service as fair while just two percent said service was poor. Respondents were also asked to rate Lodi Public Transit's response time. Again the transit system received positive comments, with 87 percent saying that response time is either good or excellent. However, 13 percent of the respondents did indicate that response time was only fair and 1 percent said it was poor or did not know.

Sometimes people expressed concern about the length of time they must wait before being picked up by the transit service. When asked. 54 percent of the respondents said that they only needed to wait 15 minutes or less to be picked up. Another 32 percent indicated that it took between 15 and 30 minutes for the transit service to arrive at their door. Nearly 13 percent indicated. however. that they had to wait between a half hour and 60 minutes before being picked up. It does appear from the crosstab data that people living south of Vie Street and west of Hutchins Street experience the longer delays (30 minutes or longer) than people living in other parts of the city.

Respondents felt that the existing Lodi Public Transit dispatch system works well. Eighty- four percent rated the dispatch system either good or excellent while 7 percent felt it was only fair. Just 5 percent rated the existing dispatch system as poor.

Preferred Transit System

Several questions were asked about ways to improve existing transit service. Twenty-six percent requested that the wait time be reduced. 20 percent said that service should have larger or more

vehicles, 15 percent asked for transit service be provided to other cities. and 6 percent asked for mended hours. Smaller groups of respondents offered other types of suggestions.

Respondents were also asked how important it is for Lodi Public Transit to operate on Sunday. Over 74 percent indicated that it was either somewhat important or very important that this type of service be provided. However. 20 percent said that in their opinion. Sunday service was not important.

A question was also posed to determine if people prefer retaining the existing response-demand type system or whether fixed route bus service should be established. Seventy-three percent of the respondents favored retaining the existing door-to–door service. On the other hand, only 2 percent expressed support for fixed-route service. However. 25 percent said that both door-to-door and facd route service should be provided.

The crosstab analysis suggests that 72 percent of respondents who considered themselves frequent users and 73 percent of occasional users of Lodi Public Transit favor retaining the door-to-door service. Only 3 percent of frequent users and none of the occasional users of the transit service favor fixed route service.

Frequency of Use

Seventy-eight percent of the respondents considered themselves frequent users while 18 percent said they use the system occasionally. Only 4 percent of those who responded indicated they almost never use the service.

Respondents were also asked "What is the main reason you don't use Lodi's transit system on a frequent basis? Over 20 percent said that they had no commute need for transit service, another 17 percent indicated that transit took too long, and 14 percent said that they like or need the use of their car. Smaller groups said that transit is inconvenient (3.4 percent), does not go where I need to travel (3.4 percent), it is too expensive (3.4 percent). or indicated some other reason (24 percent).

from a review of the crosstab data. 78 percent of the on-board respondents who rated Lodi's transit service as excellent also use the service at least three or more times per week. Similarly, 46 percent of those who consider the transit service as good. also ride more than three times a week.

Unmet Transit Needs

Several questions were asked to determine what. if any, needs exist that are currently unmet by Lodi Public Transit. The first was asked as an open-ended question, probing all survey respondents for suggestions to improve Lodi Public Transit service. Table 5-2 displays the frequencies for this question.

TABLE 5-2

Suggestions for Improving Lodi Public Transit Service

Suggestions	Percentage
Pick Up On Time/Reduce Wait	26.1
More/Bigger Vehicles	19.6
Connect to Other Cities	15.2
More Hours	6.5
Advertise Services	4 3
Other (lea than 25% mentions)	6.6
Multiple Responses	17.4

The most frequently mentioned response, reducing the wait time, was mentioned by more than two in ten (26.1 percent) respondents. This was followed with suggestions for more and larger vehicles, initiate intercity transit service. extend its hours. and advertise its services.

Another question was asked to determine if there was a desire for Lodi Public Transit to extend its weekday hours by rating it as 'very important.' 'somewhat important.' or 'not important." An index was calculated for each question by subtracting the percentage of 'not important" responses

fmm the percentage of 'very important' responses and adding 100. With 27 percent classifying this as a 'very important' need and 51 percent determining it to be "not important.' the index value for offering weekend service was 76.

Respondents were also asked if there was any other place they would likely use a fixed route to go. A large number of people, 34 percent. said they would like a fixed route system between Lodi and Stockton. This was followed by 7 percent to Galt, and 3 percent to both Woodbridge and Sacramento. Fifty-two percent either expressed no opinion or specified another destination.

Potential Destinations

Transit riders were asked how likely they would be to *use* Lodi Public Transit if it were to provide commuter *service* to destinations outside Lodi An index value ranging from 0 to 200 was again calculated for each response. Possible responses included "very likely: "somewhat likely,' and 'not likely". With 28 percent classifying this as "very likely' and 22 percent determining it to be "not likely: the inda value for providing commuter service outside Lodi was 106.

Respondents were also asked the following question: Is there any other place you would be likely to use a fixed route system to go? (If yes, where?) Of this group 45 percent said no, while the remainder, 48 percent. indicated they would use a fixed route *system* to travel to nearby cities (Galt, Stockton. Sacramento, and Woodbridge). Finally. 7 percent expressed a preference for other destinations.

Transit riders were also asked their opinion about the need for extending Lodi Public Transit to provide *service* to Stockton. Future *service* to Stockton earned an index value of 120. Over half of the sample favor extended service to Stockton. while 44 percent did not feel it was important *or* expressed no opinion.

COMPARISON WITH COMMUNITY SURVEY RESULTS

A random telephone survey of Lodi residents was also completed as part of this transit assessment. The survey consisted of 43 questions, 39 of which were asked (the remaining four were coded by observation or were calculated). A total of 400 telephone interviews were completed. using a random digit dialing method. with a sampling error of +/- 4.9 percent (at the 95 percent confidence level). Although structured and conducted differently. the on-board and telephone surveys shared a number of questions enabling a comparison of results. This section highlights some of the most important comparisons of these two data sets.

Public Perceptions

Thirty-five percent of the telephone respondents said they were unwilling or unable to use public transit in Lodi. The remaining 65 percent claimed to be willing to take public transit, and of that number, just 7 percent said they were unable to take advantage of it In addition, when asked to rate the transit system. a large majority of the telephone respondents, 74 percent, rated the system negatively. with more than 44 percent conferring a poor rating of Lodi's system.

When asked to rate Mi ' s transit services, on-board respondents rated the system much higher than telephone respondents by a margin greater than 6 to 1. While the difference between the two groups is significant, it is not surprising that people who ride Lodi Public Transit are more favorable towards the system than the general public, many of whom do not use transit.

People from both survey groups felt that Lodi Public Transit's response time is good or excellent. Eighty-three percent of the on-board group gave a good or excellent rating, while 55 percent of the general public also agreed. However, a larger percentage of the public rated the response time as poor (19 percent) than those who use the system (1 percent). Table 5-3 shows the differences in opinion between the two groups.

Preferred Transit System

Both groups expressed differing levels of support for extending Lodi Public Transit's service on weekdays. Forty-four percent of the on-board and 53 percent of the public said extended weekday service was somewhat or very important. However, 51 percent of the on-board and 38 percent of the telephone respondents said extended service was not important.

When asked about the importance of Sunday service. there was strong support. Seventy-four percent of the on-board and 80 percent of the telephone respondents would like Sunday service. However. there appears to be far greater public support for fixed route service than found among existing on-board users (57 percent to 2 percent). In contrast, on-board respondents favor the existing door-to-door service in larger numbers than the general public (73 percent to 24 percent). It is likely that the level of support for these different service alternatives by the two groups are due, in part, to their opinions about transit service or based on their existing use of Lodi Public Transit.

TABLE 5-3

Comparison of On-Board/Telephone Results of Transit Service in Lodi

Question	Percentage Excellent	Good	Fair	Poor
How Would You Rate Lodi's Transit Service?				
On-Board	37	49	11	2
Telephone	3	11	15	22
How Would You Rate Response Tie for Lodi Public Transit?				
On-Board	32	51	12	1
Telephone	23	32	23	19

Note: Figures do not total 100 percent due to people responding "undecided" or who gave multiple responses.

Frequency of Use

In comparing the two surveys on how often Lodi Public Transit is used. only 19 percent of the public rides the system frequently in contrast to 78 percent of the on-board respondents. On the other hand, 18 percent of the on-board respondents said they rely on the service occasionally while 65 percent of the public answered similarly.

Table 5-4 shows responses from the two groups concerning why people do not use Lodi's transit system on a frequent basis. From the information collected, on-board respondents felt that they have no commute need. For telephone respondents, many said that they need or like the convenience of using their automobiles for travel.

Finally. in comparing how often people from both groups ride Lodi Public Transit during a typical month, 29 percent of the public in contrast to 30 percent of the on-board passengers use Lodi Public Transit I or 2 times per week. On the other hand, 57 percent of the on-board said they use

TABLE 5-4

Reasons People Don't Use
Lodi's Transit System On A Frequent Basis

Reasons	Percentages On-Board	Telephone
Inconvenient	3	6
Takes Too Long	17	5
Need/Like My Car	14	64
No Commuting Need	21	6
Doesn't Go Where I Want it To	3	5
Other	42	14
Total	100	100

the service at least three or more times per week, while only 7 percent of the general public said it rides Lodi Public Transit this frequently.

As for improving existing transit service. both the on-board and telephone respondents favored Lodi Public Transit reducing the wait time. As shown in Table 5-5, the public suggested that the

TABLE 5-5

Suggestions for Improving Lodi Public Transit Service

Suggestions	Percentage On-Board	Telephone
Pick Up On Time/Reduce Wait	26	20
Short/More Direct Trip	2	1
Advertise Services	4	7
More/Bigger Vehicles	20	7
Connect to Other Cities	15	1
Other	33	64
Total	100	100

transit system advertise more while on-board respondents favored having more, larger transit vehicles.

Potential Destinations

Fifty-seven percent of telephone and 67 percent of on-board respondents favor transit service between Lodi and Stockton. However, 37 percent of telephone and 26 percent of on-board respondents said such service was not important.

CONCLUSIONS

During two days in March of 1992. a non-random on-board survey was conducted of passengers using Lodi Public Transit. Based on the sample. 86 percent consider the transit service to be either good or excellent while just 2 percent rated service as poor.

Other conclusions from the survey include the following:

- Four out of five of the respondents felt the transit system's response time is good or excellent.

- Over half of the respondents said that they only needed to wait 15 minutes or less to be picked up. Another 30 percent indicated that it took between 15 and 30 minutes for the transit service to arrive at their door.

- Eighty-four percent rated the Lodi Public Transit's dispatch system as either good or excellent while 7 percent said it was only fair.

- As for future improvements to the system. over 74 percent indicated that it was either somewhat or very important that Sunday service be initiated.

- When asked if they had a preference for door-to-door or fixed route service. well over half of the respondents favored retaining the existing door-to-door service. Only IS percent expressed support for fixed route service.

- Suggestions for improving existing Lodi Public Transit's service included reducing the wait time (26 percent). having more/bigger vehicles (20 percent). and providing transit connections to other cities (IS percent).

- Over two-thirdc of the sample said they would favor extended service to Stockton. while a third did not feel it was important or did not express an opinion

The on-board results, which wcre collected through a random. statistically-significant process, wcre also compared with results from an earlier telephone survey. Some of the more significant comparisons are highlighted below.

- Thirty-five percent of the respondents said they were unwilling or unable to use puhlic transit in Mi. The remaining 65 percent claimed to he willing to take puhlic transit. and of that number, just 7 percent said they were unahle to take advantage of it.

- In addition. when asked to rate the transit system, a large majority of the respondents. 74 percent, rated the system negatively. with more than 44 percent conferring a poor rating of Mi's system.

- On-board respondents rated Lodi's transit system much higher than telephone respondents by a margin greater than 3 to 1. While the difference hetween the two groups is significant. it is not surprising that people who ride Lodi Public Transit are more favorable towards the system than the general puhlic. many of whom do not use transit.

- Both groups expressed strong support for establishing Sunday service.

- There is far greater puhlic support for fixed route service than found among existing transit users.

- Fifty-seven percent of telephone and 67 percent of on-hoard respondents favor transit service hetween Lodi and Stockton.

SECTION 6

SECTION 6

Five Year Service Plan and Implementation Schedule

As the city's population grows, system ridership will also likely increase. However, without major changes, the existing transit system will find it increasingly difficult to meet public transit needs. For this reason, the city should begin planning for the expansion of its existing transit service to include both demand-response and fixed route bus service.

A two-tier level of service would enable Lodi Public Transit to continue to meet the needs of elderly and handicapped residents, but also allow the system to serve other potential transit markets including school students and the general public In addition, the availability of reliable and convenient fixed mute service could provide transit access to all parts of the city on a regularly scheduled basis, provide a means of transportation for those individuals who do not drive or possess an automobile, reduce the potential for localized traffic congestion, and help improve local air quality.

While it is extremely important that existing and future transit service be both cost-effective and responsive to community needs, there is no widely-accepted method for determining when to shift from a demand-response type system to an expanded system of demand-response and fixed route service. A number of factors must be considered including response time, the frequency of service, speed and travel time, user cost, and system reliability. Community-based issues include social objectives, environmental concerns, economic efficiency.and the role transit can play in improving local travel mobility.

Given these different issues and their varying impact on transit service in Lodi, it is recommended that Lodi Public Transit initiate a phased program of transit system improvements that will result in the development of fixed route service and the continued provision of demand-response service. Each phase is described below.

PHASE I - DEVELOP/IMPLEMENT TRANSITION STRATEGY

Because of the ADA which requires the continuation of paratransit service for disabled individuals, it would be useful for the City of Lodi to establish a transition strategy. The transition strategy would include the following elements:

- the acquisition of larger vans for demand-response service;
- identification of enhancements that will improve the existing dispatch system and help reduce system wait time;
- hire additional dispatchers and other staff as required;
- initiate Sunday and passenger subscription service to increase ridership and improve system productivity;
- purchase an automated data reporting system;
- secure FTA Section 9 funding; and
- develop a marketing plan to promote transit use.

Each of these elements are described below.

Acquire larger Vans For Demand-Response Service

The city has already begun implementing this transition element by ordering two new nine passenger vehicles for Lodi Public Transit. Each vehicle will be equipped with hydraulic wheelchair lifts for handicap access and are intended to replace smaller vehicles now in use. Similarly, the city intends to replace two additional vehicles with new equipment during FY 93-94. To comply with the *ADA,* all new vehicles will be quipped with hydraulic wheelchair lifts for handicap use.

Each vehicle now operated by Lodi Public Transit travels. on average. nearly 18,000 miles each year. With this heavy travel *use,* the need to maintain reliable equipment, and the anticipated increase in system ridership, it is recommended that the transit system continue its vehicle replacement program Over the next five years. From an operational standpdint, the use of these larger vehicles will provide transit system management more flexibility in meeting peak hour travel demand and allow the system to meet future growth in system ridership.

Improve the Existing **Dispatch System**

Steps should be taken to improve the existing dispatch system. Currently. one person answers incoming telephone calls, records the origin and destination information on a log sheet. contacts a driver and routes the vehicle, and then monitors the pickup and delivery of individual passengers by referring to the trip sheet. To simplify this process and to reduce the amount of work needed for tracking passengers, the dispatcher could monitor the location of vehicles using a city map mounted on the office wall. As vehicles are directed around the city, the dispatcher could move a colored marker on the map showing the location of the vehicle. This would enable the dispatcher to easily identify a vehicle in close proximity to a passenger, tell the passenger how soon they would be picked up, and permit the dispatcher to monitor the location of each vehicle in the field.

As telephone calls are received. the dispatcher would time-punch a ticket (consisting of an original copy and carbon backup) recording when the call was received and note the passenger's origin and destination. The ticket would then be placed on the wall map in the order the call was received. When the passenger is picked up, the ticket would then again be punched showing the pickup time. Finally, when the passenger is dropped off at his or her destination, the dispatcher would timepunch the ticket a thud time showing the destination time. The ticket would then be removed from the board. with the original submitted to the city for reimbursement and the copy being kept by the contract operator.

Another important improvement would be to add a second individual to the dispatch system responsible for *answering* incoming telephone calls and for initially filling out the trip ticket. With a 'receptionist" answering calls, the dispatcher would have fewer interruptions and enable her to concentrate on the city map directing vehicles and maintaining radio contact with the drivers. From a cost standpoint. it may also be desirable to have the receptionist work part-time and only during peak travel periods during the day. say from 11:00 a.m. to 3:00 p.m., five days a week.

The basic goal in implementing these two improvements would be to reduce the wait time. As mentioned earlier, one of Lodi Public Transit's service standards is to pick up riders and deliver them to their destination within 45 minutes of their call for service. While the 45 minute response window is not considered excessive when compared with other demand-response systems, the principal goal in implementing improvements to the dispatch system should be *to* reduce the response window to no longer than 30 minutes.

Hire Additional Staff

To implement improvements to the dispatch system Lodi Public Transit will need to reassign existing staff or hue an additional individual to answer incoming telephone calls. To minimize additional costs, the receptionist could be used during the day when incoming calls are heaviest.

Initiate Sunday and Reservation/Passenger Subscription Service

Based on the results of the on-board and community surveys completed as part of this assessment. there is public support for Lodi Public Transit to provide Sunday *service.* Should funding become available. Sunday service should be provided on a trial basis to determine whether suffient ridership exists to support the expanded weekend service.

Lodi Public Transit should also consider offering a reservation service for people who want to make their travel plans m advance. As part of the reservation system, the transit system should also make available a 24-hour telephone answering service for people to use for either reserving or canceling transit reservations.

Another way to improve transit system efficiency would be to initiate passenger subscription service. This type of service would be used by individuals whose travel schedules are predictable and who require transit *service* at least several times each week. For example, a person in need of Visiting their doctor twice or three days a week over a period of time may find this service useful. Other subscription users would include students attending city schools and people commuting to and from work.

The implementation of this service could help reduce the number of people calling Lodi Public Transit thereby relieving pressure on the dispatch system In addition, availability of subscription service would help expand transit use throughout the community (particularly among students), increase system ridership. increase farebox revenues, and improve public visibility of the transit system. It is likely, however, that once fixed route service begins in FY 94-95. many of the people using subscription service will shift Over to using the fixed route system.

It is important. however. that subscription service not diminish the service performance for the rest of the transit system. To avoid this potential problem, the transit system, for example. may choose to use its larger vehicles for subscription service and then "pre-position' them for demand-response service once the majority of subscribers have been picked up and delivered. This would coincide with the fact that most of demand-response ridership occurs later in the morning and in the early afternoon. The improvements to the dispatch system and the use of the transit systems operations map described above will also help the dispatcher minimize problems with the integration of the subscription and demand-response service.

It should be noted that under the ADA, subscription service is not prohibited for complementary paratransit service, but, it may not absorb more than 50 percent of the complementary paratransit trips available at a *given* time. unless there is excess non-subscription service.

Purchase Automated Data Reporting System

Currently, Lodi Public Transit records all passenger trip information using handwritten daily transit system logs. These log sheets *show* the total number of trips made during the day, the total number of passengers *carried,* and other basic information. The sheets are then collected, bundled, and submitted to the city each week. *Once* received, City staff then take this information and compile a summary of operational data for the transit system. This data include figures, for example, on total miles driven, total fuel used, total service hours, number of service days, average miles per trip, and average vehicle fuel economy. Since no system operating cost data is reported *on* a monthly basis, it is difficult to use the other data to effectively evaluate monthly system performance.

With the eventual operation of both demand-response and fixed route service. monitoring system performance and costs will become increasingly important. Consequently. it is recommended that during the transition phase Lodi Public Transit assume responsibility for preparing detailed transit system performance reports. To aid in this effort. the transit system should purchase, install, and maintain an automated data reporting system capable of producing reports on state-mandated performance indicators, on-time performance, ridership, operating costs, and other system data of interest to the city. This system could. for example. simply consist of a personal computer using spreadsheet and graphics software and a printer. Reports generated by the sytem should be

submitted to city staff on a monthly basis and be used to evaluate the management and operation of the transit system.

A similar data reporting system is followed for Lodi Taxi; however. even less information is currently available about taxi service performance. For example, insufficient data exists to calculate such standard performance indicators such as the cost per hour. cost per vehicle mile, the cost per passenger hour, and the cost per passenger mile. Although many of the taxi cabs are privately owned and may be used for non-taxi transportation (i.e., private use) making it difficult to track taxi hours and mileage, it is recommended that each taxi driver record this information on a log sheet so the data can be used to evaluate the cost-effectiveness of the taxi service. The automated reporting system used for Lodi Public Transit could also be used for generating reports for the taxi service.

Secure FTA Section 9 Funding

During this period the city staff should also work with the *COG* to obtain Section 9 funding from the Federal Transit Administration. Based on information provided by the COG, Lodi's annual apportionment for FY 1991-92 was $490,772. While state *guidelines* limit the percentage of money that *can* be spent *on* operating and capital costs, the securing of these funds will significantly enhance the city's ability to successfully implement this transit plan. Federal guidelines do allow for Section 9 operating funds to be used for capital expenditures; *however*, Section 9 monies can *not* be used for operating costs.

Develop A Transit System Marketing Plan

With implementation of the service improvements described above, Lodi Public Transit should also develop and implement a transit system marketing and promotion plan. The plan should evaluate issues influencing transit use in Lodi, identify specific steps for increasing system ridership. discuss the design and distribution of marketing materials. and include an action plan, implementation schedule. and marketing budget, *An* effort should also be made to identify companies, service organizations, and other community groups who would be willing to distribute Lodi Public Transit marketing materials to residents.

One way to offset marketing costs would be for the transit system to allow for local companies and groups to purchase advertising space on transit buses. The marketing plan could provide size and design guidelines, cost information. and other advertising details.

PHASE II - PREPARE *AN* OPERATIONAL PLAN

During this phase the City of Lodi will need to prepare an operational plan fot implementation of fixed mute service. The plan will reflect the information collected during this assessment but also provide additional detail on key components of the new service including the following:

- **Routes to Be** Served. Survey findings and **DAR** logs suggest that fixed mute service should include *service* to the Vineyard Shopping Center and downtown Lodi. Other likely transit destinations include area high schools, large employer sites (General Mills, Pacific Coast Producers), area hospitals. and community centers.

- Scheduling. The operational plan will need to identify route frequencies and transfer points. Scheduling decisions should consider weekday service. night service, and weekend service.

- Equipment Requirements. The operational plan will need to identify the number and type of vehides to be purchased, their seating capacity, and other vehicle specifications.

- Farebox Structure. Using ridership projections, estimated system costs, and state farebox recovery requirements, the operational plan will need to describe a farebox structure that ensures that the fixed route service is cost-effective to operate and complies with state law.

- Capital and Operating Costs. The operational plan will need to identify capital and operating costs for the fixed route system, assess the availability of system funding. including FTA Section 9 money. and recommend a funding plan.

- Marketing and Promotion. To encourage ridership for the fixed route service, the operational plan will need to identify how existing as well as new transit marketing materials and promotional activities can be used to increase the likelihood for successful implementation of the new service.

- How the Service Should Be Organized. Fixed route service can be organized several different ways For example. the city could (1) rely on a contractor to operate and maintain the service, (2) purchase the vehicles but have a contractor operate the system, or (3) operate and maintain the service itself. S i each option will differ in terms of cost and system flexibility, the operational plan should recommend an organizational structure that best meets the city's transit needs.

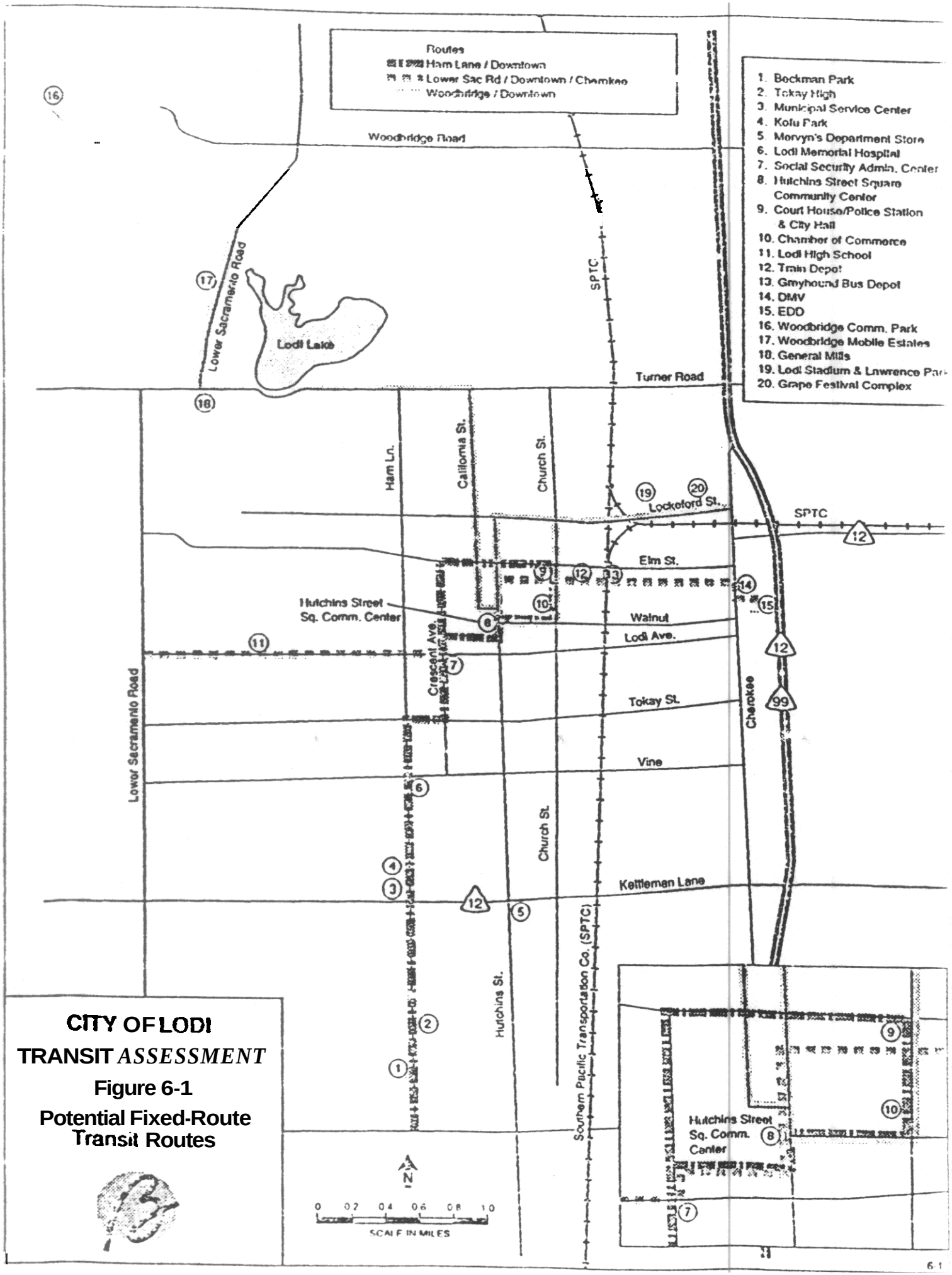
PHASIII - IMPLEMENT FIXED ROUTE AND DEMAND-RESPONSE SERVICE

This phase. based on the work completed during the two previous phases. is designed to implement both fixed mute and demand-response service. With this in mind, a conceptual plan has been prepared that consists of the following elements.

Route and Scheduling Requirements

several routes have been identified and are suggested for serving major residential and commercial areas of the city. Two shuttle buses, for example, could travel each route operating on 20 or 30 minute headways and would use the Hutchins Street Square Community Center as a major transfer station for the system. This assumes an average vehicle speed of 14 miles per hour (a planning factor used by the Stockton Metropotitan Transit District) with sufficienttime for layover.

Possible transit routes, as shown in Figure 6-1, might include the following:



CITY OF LODI

TRANSIT *ASSESSMENT*

Figure 6-1

Potential Fixed-Route Transit Routes

- **South Ham Lane/Downtown** (total one way length, 3.2 **miles).** This route would **begin** at the intersection of South Har I and Harney Lane. The **bus** would travel north to Tokay, turn east to Crescent Avenue, and then proceed north to Elm. At Elm and Church Street, the vehicle would then head south. turn right on Walnut to the Community Center. the end of the **line.** After boarding and off-boarding passengers, the **bus** would then return along the same route. **This** would operate on **a 20** minute headway.

  Destinations along **the** route might include Beckman Park, Tokay **High School,** the Municipal Service Center, Kofu Park, **Lodi** Memorial Hospital, the Social Security Administration office, City **Hall** and the Chamber of Commerce located downtown.

- **Lower Sacramento Road/Downtown/Cherokee** (total one way length, **3 miles).** This route would originate at the intersection of Lower Sacramento Road and **Lodi** Avenue. Heading east **on** Lodi Avenue, the bus **would *travel*** north **on** Crescent, and head east on Walnut to the Community Center. At Church the **bus** would turn east on Elm Street to Cherokee and then to the Department **of** Motor Vehicles **and the** *California* Employment Development Department **offi** on Oak Street. ***After*** boarding and off-boarding passengers, the **bus would** return **along** the same route.

  Destinations along this route might include Lodi High School, the **Social** Security Administration **office,** the Chamber of Commerce, the **train** and bus depot, the California Department of Motor Vehicles, and the California Employment Development Department **office.** This route would operate on a 20 minute headway.

- **Woodbridge/Downtown/Lawrence** Park (total one way length, **5.4 miles).** This route originates at Woodbridge Community Park and **follows** Woodbridge Road south to Turner Road. Travelling east on Turner, the bus would turn south at California until it reached the

Community Center. After stopping at the Center. the bus would head north to Lockeford Street, turn east and stop at Lawrence Park before returning along the same route.

Destinations along this route include Woodbridge Mobile Estates, the General Mills food processing plant, City Hall and the Court House, Lodi Stadium (Lawrence Park), and the Grape Festival Complex near Cherokee Due to its length, this route would operate on a 30 minute headway.

As mentioned earlier, the operational plan to be developed during Phase II will describe in more detail specific routes. the number of vehicles to be purchased, and the frequency in which the fixed route system should operate.

Lodi Public Transit should continue its demand-response service but limit its use to (a) people with physical or mental disabilities that predude them from using the fixed route system. or (b) individuals who are not within walking distance of a shuttle stop and want to use the shuttle bus.

Potential Ridership

Determining potential ridership for any transit system is difficult to estimate. Given that ridership can fluctuate from year to year depending on fare increases. changes in routes and schedules, and other factors. many transit system look at historic growth and use this data to estimate future ridership. Yet, accurately forecasting future ridership is important because of its relationship to farebox revenues and achieving the state's 20 percent farebox recovery requirement.

In this instance, however. projecting future ridership for Lodi Public Transit is somewhat more complicated with the desire to maintain demand-response service, initiate subscription service. and ultimately implement fixed route transit service. In addition, it is difficult to predict the impact marketing and promotion will have on future ridership.

With these factors in mind, ridership estimates were developed using the following assumptions:

- Between FY 82-83 and FY 91-92 (estimated), Lodi Public Transit ridership increased an average of 5.3 percent per year. More recently, the average annual rate of growth between FY 89-90 and FY 91-92 was 5.4 percent. Thus, it is assumed that the basic demand. response ridership will continue to grow at an annual rate of 5.3 percent through FY 93-94 when fixed route service is started. During the remaining two years of the plan growth is forecast at 2 percent per year.

- Beginning in FY 92-93. the proposed subscription service would be offered as part of the demand-response service. Its success will likely be determined, in large part, by the effectiveness of the transit system marketing plan.

  For estimating purposes. it is assumed that subscription service will result in a 2 to 3 percent increase in annual ridership. or 1620 to 2,430 additional passengers per year. (Projections based on estimated FY 91-92 ridership of 81,130 passengers.)

- Beginning in FY 94-95 when fixed route ridership is implemented. it is assumed that Lodi Public Transit will institute a new policy that permits only non-ambulatory passengers to use the demand-response service. It is estimated that this will result in approximately 70 percent of the demand-response (and subscription) ridership to shift to the fixed route service. Once established, it is estimated that fixed mute service will grow at 5 percent for the two remaining years of the plan

Table 6-1 shows estimated ridership for Lodi Public Transit. with separate estimates for demand-response, subscription, and fixed route service. The transit system and city staff will need to monitor ridership levels, and depending on ridership demand. may need to make system adjustments on an as-needed basis

TABLE 6-1

Projected Ridership for Lodi Public Transit

Fiscal Year	Demand Response	Subscription Service (1)	Fixed Route (2)	Total
90-91 (actual)	81,130	N/A	N/A	81.130
91-92 (est.)	86,600	N/A	N/A	86,600
92-93	91,190	2,736	N/A	93,926
93-94		2,818	N/A	98,841
94-95 (3)	30,334	2,902	70,778	104.014
95-96	3094 1	2,990	74,317	108.248
96-97	31,560	3,080	78,033	112,673

(1) Assumes average annual increase of 3 percent.
(2) Assumes average annual increase of 5 percent.
(3) Assumes 70 percent mode shift from DAR to fixed route service beginning in FY 94

Vehicle Design and Specifications

Vehicles which are used as part of the Lodi Public Transit fixed route system should meet the following design specifications:

- Seating capacity, 12 to 15 passenger;
- Wheelchair equipped and meet all requirements under the ADA
- Air Conditioning and
- Meet all applicable state and federal vehicle emission requirements. If possible, the vehicles should operate using a "clean burning" alternative fuel such as compressed natural gas, methanol, propane. or electric power.

As discussed in Section 2, San Joaquin County has been classified as a severe air quality non-attainment area by the California Air Resources Board (ARB). In 1991, the ARB began enforcement of new emission standards for nitrogen oxides (NOx) and for particulates, both combustion byproducts from the burning of diesel fuel. As a result, diesel fuel buses are now required to use emission control technology (a particulate trap) to legally operate within the state. Even with a particulate trap, diesel fueled buses are not anticipated to be able to meet 1998 federal emission standards. It is also likely that new NOx and particulate standards to be established in 1992 (and implemented by 1996) will preempt federal standards and thus prohibit the sale of diesel buses in the state.

Consequently, Lodi Public Transit should consider using alternative fuels for its vehicle fleet. Alternative fuel options might include methanol, natural gas. propane, and electric power. According to data compiled by the Sacramento Metropolitan Air Quality Management District, the additional costs associated with the use of these different fuels vary from approximately $600 to $3,000 per vehicle. It is recommended that should the transit system decide to retrofit or purchase vehicles using alternative fuels, a technology and financial analysis first be conducted.

Compliance With the Americans With Disabilities Act

When fixed mute service is implemented, federal law requires the City of Lodi to also provide complementary paratransit service to individuals with physical or mental disabilities unable to use a fixed mute system. This type of paratransit service is currently offered by Lodi Public Transit as part of its demand-response transit program.

Under the ADA, complementary paratransit programs must provide a level of service that is comparable to that provided on the fixed route system. Although the law is targeted at those cities with fixed route service but lacking comparable paratransit service, it does not require a city implementing (emphasis added) fixed route service to prepare a paratransit plan. It is recommended, however. that Lodi recognize the needs of its disabled residents and prepare a paratransit plan. United States Department of Transportation regulations require that a plan include the following information:

- A description of the existing or planned fixed route system;
- A description of existing and proposed paratransit services;
- Information about the way in which passenger eligibility will be determined; and
- A discussion of efforts to coordinate the provision of service with other public entities in overlapping or contiguous areas.

Once the plan is prepared the Lodi City Council should approve the document prior to it being reviewed and certified by the COG, the local transportation planning agency. The document should then be submitted to the regional office of the Federal Transit Administration for final approval.

Marketing and Promotion

Building upon the marketing plan developed during Phase I, the marketing plan should be refined to incorporate fixed route service. As with the original document, an effective marketing plan must identify the issues, problems, and opportunities associated with transit use in Lodi; establish specific and realistic transit system marketing objectives; describe marketing strategies and tactics to reach those objectives; define an organizational marketing strategy and one to two-year action program; specify who is responsible for program implementation; provide a budget and schedule; and provide for periodic monitoring and review of progress under the plan and for modifications, as necessary.

IMPLEMENTATION SCHEDULE

The phased program should be implemented over a five year period as follows:

- Phase I - Develop/Implement Transition Strategy, July 1992 through June 1994. This phase will consist of acquiring larger vehicles, improving the existing dispatch system, hiring additional personnel. initiating Sunday and passenger reservation/subscription service, purchasing an automated data reporting system, securing FTA Section 9 funding and preparing a transit system marketing plan. The principal service performance goal is to reduce passenger wait time from 45 to no longer than 30 minutes.

- Phase II - Prepare An Operational Plan, July 1993 through June 1994. The plan will include detail on proposed fixed routes.! scheduling and equipment requirements. farebox structure, estimates of capital and Operating costs, marketing and promotion, and how fixed route service will operate. The plan should also discuss how best to integrate the fixed route and demand-response transit services.

- Phase III - Implement Fixed Route and Demand-Response Service, July 1994. The fixed route service could initially consist of four to six vehicles operating on two or three routes identified in Figure 6-1. Lodi Public Transit will need to closely monitor both fixed route and demand-response ridership and system costs.

LINKING IMPROVEMENTS TO SYSTEM OBJECTIVES

Objective 1:

Meet the transit needs of city residents.

Recommendations:

Continue to provide demand-response service, initiate subscription service, and implement reliable and convenient fixed route service to city residents. All new vehicles purchased by Lodi Public Transit will be handicap accessible. In addition, expand weekend service by providing Sunday service.

Objective 2:

Provide for efficient and cost-effective transit service.

Recommendations:

Reduce passenger wait time through improvements in the dispatch system, thd introduction of passenger subscription service, and the purchase and use of an automated data reporting system for monitoring system performance and productivity of both Lodi Public Transit and Lodi Taxi.

Objective 3:

Maximize resources available for management and operation of Lodi Public Transit.

Recommendations:

Implement improvements to the dispatch system, including the use of a receptionist to answer incoming telephone calls, monitor system productivity using performance measures and other data

made available from the automated data reporting system. increase the farebox recovery rate from 10 to 20 percent by 1995.

Objective *4:*

Secure stable **sources of funding.**

Recommendations:

Continue ***to*** make use of **TDA** funds for funding both Lodi Public Transit and subsidizing Lodi Taxi. Work with the ***COG*** staff to apply for FTA Section ***9*** funding, and take steps to develop advertising as a revenue source.

Objective 5:

Foster community **awareness** and support for Lodi Public Transit. with emphasis on **increasing ridership.**

Recommendations:

Implement the recommendation for development **of a** comprehensive transit system marketing plan to encourage public awareness **of** the transit system and to encourage **its use.** ***As*** system efficiency continues ***to*** improve and with the introduction **of** service **improvements,** system ridership **should** increase.

Objective *6:*

Ensure that the transit service operates **as** scheduled and that all transit equipment has the highest level of reliability and customer appeal.

Recommendations:

Implement the recommendation for improvements to the dispatch system. the purchase and use of the automated reporting system. and the purchase of new vehicles for both demand-response and fixed route service.

SECTION 7

SECTION 7

Recommended Financial and Capital Plan

This section presents the five-year financial and capital plan for Lodi Public ransit for FY 92-93 (beginning July 1, 1992) through FY 97-98. Both the financial and capital plan are based on the service plan presented in Section 6. The financial plan reflects the *expected* system operating costs, the revenue from the farebox, and federal and state resources necessary to meet these operating needs over the next five year period.

FINANCIAL PLAN

The financial plan includes the following four components:

- Operating Costs
- capital Costs
- Operating Revenue
- Capital Revenue Sources

Tables 7-1 and 7-2 identify expected revenues and expenses for demand-resp nse service over the next five years. Actual figures for the last complete fiscal year and estimated figures for the current fiscal year are included so that comparisons can be made. Tables 7-3 and 7-4 show similar information for recommended fixed route service.

Assumptions for future costs are tied directly to the expected inflation rate and to increased service. Due to the recent economic recession and the uncertainties in inflationary increases from year to year, a rate of five percent has been used for planning purposes. Lodi Public Transit must continue to closely monitor the annual rate of inflation assumed in this and future transit plans. Additional assumptions are as follows:

- For demand-response service. ridership is anticipated to increase at 8.3 percent through FY 93-94, when fixed route service begins.

TABLE 7-1

Lodi Public Transit: Demand-Response
Five Year Financial Plan: FY 92 - FY 96

	Actual FY 90-91	Estimated FY 91-92	Projected > FY 92-93	FY 93-94	FY 94-95 (2)	FY 95-96	FY 96-97
TRANSIT REVENUES (1)							
Operating Fundr							
Farabox Revenues (3)	$43,576	$46,764	$82,655	$86,980	$26,694	$27,228	$27,77
Other	25,883	1,000	0	0	0	0	
LTF Funding - Operating	267,930	365,317	84,253	90,158	0	0	
State Transit Assistance	5,221	56,660	47,711	50,574	53,608	56,825	60,23
Section 9 - Operating	0	0	168,505	180,315	50,063	M.765	59.85
Total Operating Revenues:	$342,610	$469,741	$383,123	$408,027	$130,365	$138,838	$147,86
Section 9 - Capital	0	0	94,000	110,000			
LTF Funding - Capital	0	0	23,500	0	0	0	
Total Capital Revenues:	SO	SO	$117,500	$110,000	$0	$0	$(
TRANSIT EXPENDITURES (4)							
Operations	288,831	303,273	322,985	343,979	109,901	117,045	124,65
General Administration	33,529	35,205	37,494	39,931	12.750	13.507	14.471
Vehicle Maintenance	20,250	21,263	22,645	24,117	7,706	8,206	8,74
Subtotal:	$342,610	$359,741	$383,124	$408,027	$130,365	$138,839	$147,63
Farebox Return Rate (5):	13%	13%	22%	21%	20%	20%	19%
Told Capital Outlay:	SO	$110,000	$117,500	$110,000	SO	SO	$(
Total Expenditures:	$342,610	$469,741	$500,624	$518,027	$130,365	$138,839	$147,86

TABLE 7 – 2

Lodi Public Transit: Demand – Response
Five Year Capital Budget: FY 92 – FY 96

	Projected > FY 92-93	FY 93-94	FY 94-95	FY 95-96	FY 96-97
REVENUES					
LTF Funding – Capital					
State Transit Assistance					
Sectr 9 (Capital Equipment Share)	117,500	110,000			
Total Required	$1 17,500	$1 10,000	$0	$0	$0
EXPENDITURES					
Denland–Response System					
Replace Demand–Response Vehicles (1)	$110,000	$110,000	$0	$0	$0
(Number of Vehicles)	2	2			
Purchase Automated Data Reporting System	5,000				
Install Customer Service Telephone Lines	2,500				
Total Estimated Costs	$117,500	$1 10,000	$0	$0	$0

Note: (1) Vehicles assumed to cost $55,000 eac

Arthur Bauer & Associates, July 1992.

TABLE 7-3

Lodi Public Transit: Fixed Route
Five Year Financial Plan: FY 92 – FY 96

	Actual FY 90-91	Estimated FY 91-92	Projected > FY 92-93	FY 93-94	FY 94-95 (1)	FY 95-96	FY 96-97
TRANSIT REVENUES							
Operating Funds							
Farebox Receipts (2)	$0	$0	$0	$0	$55,260	$57,960	$60,835
LTF Funding – Operating	0	0	0	0	92,240	93,395	81,703
State Transit Assistance	0	0	0	0	0	0	0
Section 9 – Operating	0	0	0	0	130.000	140.000	163,406
Total Operating Revenues:	NIA	NIA	$0	$0	$277.500	$291,375	$305.944
Section 9 – Capital	--	--	120,000	126.390	25,000	0	0
LTF Funding – Capital	--	--	30,000	78.610	0	0	0
Total Capital Revenues:	NIA	NIA	$150.000	$205.000	825,000	$0	$0
TRANSIT EXPENDITURES (3)							
Total Operating Costs	0	0	0	0	277.500	291.575	305.944
Subtotal:	N/A	N/A	$0	$0	$277.500	$291,375	$305.944
Farebox Return Rate:	N/A	N/A	N/A	N/A	20%	20%	20%
Total Capital Outlay:	--	--	$150,000	$205,000	$25,000	$0	$0
Total Expenditures:	N/A	N/A	$150,000	$205.000	8302.500	$291,375	$505,944

Notes: (1) Fixed route service begins; assumes 70 percent mode shift from demand-response to fixed route service, includes system subscribers, and assumes initial introduction of 4 vehicles (3 and a spare), with 3 vehicles operating 3,700 hours per year.
(2) Estimate based on projected ridership multiplied by the avg. farebox revenue per passenger of $ 75.
(3) Operating costs based on vehicle operating cost per hour of $25 multiplied by total annual vehicle hours, and adjusted for inflation.

Arthur Bauer & Associates, July 1992.

TABLE 7 – 4

Lodi Public Transit: Fixed Route
Five Year Capital Budget: FY 92 – FY 96

	Projected > FY 92–93	FY 93–94	FY 94–95	FY 95–96	FY 96–97
LTF Funding	30,000	78,610			
	120,000	126,390	25,000		
Total Required:	$150,000	$205,000	$25,000	$0	$0
EXPENDITURES					
Fixed Route System					
Purchase Vehicles for Fixed–Route Service (1)	150,000	150.000			
(Number of Vehicles)	2	2			
Construct Downtown Transfer Station		30,000			
Construct/Install Bus Stops/Amenities		25,000	25,000		
Total Estimated Costs:	$150,000	$205,000	$25,000	$0	$0

Note: (1) Vehicles assumed to cost $75,000 each.

Arthur Bauer & Associates, July 1992.

For the remaining two years of the plan. ridership growth is forecasted at two percent per year.

Once fied route service begins in FY 94-95. ridership will increase by five percent per year through the planning period. It is also assumed that subscription ridership will rely on the fied route system for travel.

- Operating costs are projected from current costs. The operating costs consist of three components: vehicle operations, maintenance. and general system administration expenses.

For dunand-response service, the vehicle operations budget is based on historical information and adjusted to reflect inflation and the implementation of service improvements (a total of 6.5 percent). Si it is assumed that 70 percent of the existing ridership will switch to fixed route service, future vehicle operation costs have been adjusted downward by 70 percent. Maintenance and administrative costs have been calculated in similar fashion

Since no historical data exists for determining fied route service costs.an average operatingcost per hour figure was developed based on data contained in the 1989 UMTA Section 15 report for similar size transit districts. Operating costs for fied route system with less than 25 vehicles operated in maximum service ranged from $22 to as high as $75 per hour.

According to the 1989 data, the City of Fairfield in Solano County operated 7 vehicles in its fied route system at an hourly rate of $23. Although this city has a somewhat larger population than Lodi, it has similar characteristics such as land use and its proximity to major urbanized areas. Using this as a guide, $25 per operating hour is

used for forecasting Lodi's fixed route operating costs. which includes operations, maintenance. and administration.

Operating full-time during the week and accounting for Sunday service, it is assumed that each vehicle in service will operate 3,700 hours per year.

OPERATING REVENUES

The financial plan relies on three primary sources of revenue to cover both capital and operating costs. (The capital program is discussed in more detail later in this section.) The revenue sources include:

- Farebox revenues
- Transportation Development Act monies
- FTA Section 9 assistance

Farebox Revenues

The farebox revenue projection for the five year pknning period was estimated by multiplying expected annual passengers by the average revenue per passenger expected based on the existing transit system fare structure. To achieve the 20 percent TDA farebox recovery rate, the City of Lodi will need to implement fare increases for its demand-response system. from 5.50 to f.65 for elderly and handicap individuals and from 51.00 to 5130 for other individuals. Based on these proposed fare increases, an average revenue per passenger rate of $.83 was used for projecting farebox revenues. Once implemented. fixed route service will cost 5.75 per person.

It is important to note that should the demand-response service be limited to elderly and handicap passengers, state law sets the farebox recovery rate at ten percent. This plan is based. however, on the assumption that the demand-response system will continue to be used by the general public and. as a consequence. subject to the 20 percent farebox recovery requirement.

It is recommended that during the transition period and prior to the initiation of fixed route service, the transit system review its farebox structure taking into account passenger ridership, farebox revenue. and system costs.

Other Funding Sources

There are two additional financial resources available for public transportation in Lodi: (1) State of California Transportation Development Act (TDA), and *(2)* Federal Transit Administration (FTA) Section *9* funds.

TDA funds include both Local Transportation Funds (LTF) and State Transit Assistance Funds *(STAF).* The LTF funds are derived from a quarter cent sales tax on all items. the funds arc apportioned at the county level according to population. The *STAF* funds are derived from the statewide sales tax on motor vehicle fuel and are available to local transportation operators once appropriated to the State Controller, based upon an allocation formula FTA Section 9 funds are distributed through a block grant program based upon administrative formulas

Transportation Development Act (TDA)

Local Transportation Fund (LTF). As discussed earlier, LTF funds can be used to fund both demand-response and fixed route service. LTF funds can also be used to subsidize the city's taxi service. If all of Lodi's transit needs are met then these funds may be used to support road and street improvement programs. LTF's first call of funds if for transit however. This plan shows LTF going to transit in the amount necessary to prevent operating shortfalls.

State Transit Assistance Funds (STAF). State Transit Assistance Funds are' also important sources of transit funds. These funds are subject to annual state apportionments and, in past years, have been somewhat unpredictable. For purposes of this plan. STAF are assumed to increase by

6 percent each year. This is consistent with revenue assumptions made in the draft "San Joaquin County Transit Systems Plan.'

FTA Section 9 Fundq

As of the 1990 Census, the City of Lodi's population exceeded 50,000 residents thereby making the city eligible to apply for Section 9 program funds under the Federal Transit Act of 1991. Section 9 funds can be used for transit operating, capital, and planning purposes. Lodi's annual apportionment for FY 1991-92 was $490,772. Under state guidelines, however. only $263,561 of this amount can be used for operating assistance. The remaining funds may be use for transit capital or planning projects.

To become eligible for these funds, Lodi would need to satisfy several matching requirements: 50 percent for net operating expenses and 20 percent for the net capital or planning expenses. Fortunately. local match requirements can be met using TDA monies. Farebox revenue, however, cannot be used for the local match. Section 9 operating funds can be also be used for capital expenses but Section 9 capital funds can not be used for operating costs.

For purposes of this plan, Section 9 funds are assumed to increase at a moderate annual rate of 2 percent. Shown in Table 7-5 is the anticipated amount of capital and operating funds available to the City of Lodi through the Section 9 Program over the next five years.

CAPITAL PROGRAM

Table 7-2 and Table 7-4 present the capital procurement plan and budget for the demand-response and fixed route, respectively. for the five year plan. The total program is estimated to cost approximately $2.7 million, with the $607,000 attributed to replacement of demand-response vehicles. the purchase of new buses for fixed route service, and other capital improvements.

TABLE 7-5

Availability of Section 9 Funds to the City of Lodi: FY 92 - FY 96

Fiscal Year	Capital Funds	Operating Funds	Total
FY 92-93	$231,755	$268,832	fS00.587
FY 93-94	$236,390	$274,210	$510,600
FY 94-95	$241,118	$279,693	5520.811
FY 95-96	$245,940	$285,290	$531,230
FY %97	$250,859	f290.992	$541,851

Assumes annual increase of 2 percent.
Source: San Joaquin County Council of Governments. July 1992.

The capital program assumes the continued availability of federal capital funds under the FTA Section 9 grant program. With the capital plan as proposed, availability of capital funds is not expected to be a problem. A summary of the capital expenditures programmed for purchase during the five year program are as follows.

FY 92-93 Capital Program

Replace Demand-Response Vehicles

Lodi Public Transit has initiated a vehicle replacement program for its demand-response service. Due to heavy vehicle use, anticipated increases in vehicle ridership, and the need for vehicles to be handicap-accessible, it is recommended that two new vehicles be purchased during FY 92-93 and FY 93-96. Each vehicle is estimated to cost $75,000.

Purchase Automated Data Reporting System

To improve transit system efficiency and productivity, it is recommended that Lodi Public Transit purchase and install an automated data reporting system. This system could consist of a personal computer. spreadsheet and graphics software, and a printer. This system will further increase transit system staffs capabilities to tabulate, analyze, and display ridership and operational information. Funds are programmed this year for the purchase of a computer, software. and technical training.

Install Customer Service Telephone Line(s)

With the initiation of advanced reservation and subscription service. it is recommehded that Lodi Public Transit install a 24-hour customer service telephone line. This telephone service will allow passengers to obtain prerecorded information on fares, schedules. and other service information and to also leave messages for transit system staff. Funds are programmed for the installation of the telephone line and the purchase of a telephone answering machine.

Purchase Fixed Route Vehicles

Funds are programmed for the purchase of one new 12 to 15 passenger bus for fixed route service. Additional buses are to be purchased in FY 93-94. Assuming this vehide is air conditioned and handicapped equipped, vehide costs are estimated at $75,000.

FY 93-94 Capital Program

Replace Demand-Response Vehicles

The purchase of two more vehicles to replace existing equipment is programmed for this year. It is a continuation of the program described in the prior year's program.

Purchase Fixed Route Vehicles

The purchase of two more 12 to 15 passenger vehicles for fixed route use are programmed for this year. Again this is a continuation of the program described in the prior year's program.

Construct Downtown Transfer Station Kiosk/Shelter

Since the Hutchins Street Square Community Center will serve as the principal transfer station for the fixed route service, it is proposed that a station kiosk and shelter be built. The kiosk would have posted information on transit system operation and scheduling, fares, and dther relevant material. The shelter would likely be an enclosed structure with seating. It may also be necessary to construct a bus turnout to accommodate a vehicle boarding or off-boarding passengers.

Construct/Install Bus Stops/Amenities

Based on the operational plan to be prepared during Phase II, Lodi Public Transit will want to construct needed bus stops and passenger shelters along the fixed route system. These would be built over a two year period starting in FY 93-94.

FY 94-95 Capital Program

Construct/Install Bus Stops/Amenities

The construction and installation of bus stops is a continuation of the program initiated in the prior year's program.

FY 95-96 Capital Program

No capital costs are to be incurred during this fiscal year.

FY 96-97 Capital Program

No capital ***costs*** are to **be** incurred during this fiscal **year.**

MONITORING CAPITAL/OPERATING REQUIREMENTS

The availability of federal Section **9** funds will **allow** Lodi Public Transit to operate both demand-response and fixed route service. However. the transit system may have difficultly in meeting future operating and capital **costs** should these funds be reduced at some future date.

Historically, the City of Lodi has used a large portion of its TDA funds for streets and roads improvements. **For** example, in FY **90-91, $788,988** or **75** percent of the total TDA funds available **($1,051,853)** was **claimed** for street and road improvement projects. Therefore, if federal funds were reduced dramatically, **or** were eliminated at some future date, it might jeopardize the provision **of** fixed route *service* in Lodi. Of **course,** a reevaluation of the ***service*** being proposed would **need** to **be** undertaken to ensure that the TDA funds were **being** programmed **to** address the city's priorities.

Tabk **7-6** summarizes the revenues and expenditures associated in implementing a combination demand-response and fixed route transit system for the City of Lodi for FY **92-93** through **FY 96-**97.

TABLE 7-6

Lodi Public Transit
Five Year Financial Summary: FY 92 - FY 96

	Actual FY 90-91	Estimated FY 91-92	Projected > FY 92-93	M93-94	M94-95	FY 95-96	FY 96-97
TRANSIT REVENUES							
Operating Funds							
Farebox Receipts							
Demand-Response	$43,576	$46,764	$82,655	$86,980	$26,694	$27,228	$27,773
Fixed-Route	0	0	0	0	55,260	57,980	60,835
Lodi Tad Service	N/A: THIS IS CONTRACTURAL SERVICE						
Farebox Subtotal:	$43,576	$46,764	$82,655	$86,980	$81,954	$85,208	$88,608
Other	25,883	1,000	0	0	0	0	0
LTF Fundng - Operating	$267,930	$365,317	$84,253	$90,158	$142,303	$148,180	$141,559
State Transit Assistance	5,221	56,660	47,711	50.574	53,608	56.825	60,234
Section 9 - Operating	0	0	168,505	180,315	130,000	140,000	163,406
Total Operating Revenues:	$342,610	$469.741	$383,124	$408,027	$407,865	$430,213	$453,807
Section 9 - Capital	0	0	214,000	236,390	25,000	0	0
LTF Fundng - Capital	0	0	53,500	78.610	0	0	0
Total Capital Revenues:	$342,610	$469,741	$267,500	$315,000	$25,000	$0	$0
TRANSIT EXPENDITURES							
Total Operating Costs:	342,610	359,741	383,124	408,027	407.865	430,213	453,807
Subtotal:	$342,610	$359,741	$383,124	$408,027	$407,865	$430,213	$453,807
Farebox Return Rate:	13%	13%	22%	21%	20%	20%	20%
Total Capital Outlay:	$0	$110,000	$267,500	$315,000	$25,000	$0	$0
Total Expenditures:	$342,610	$469,741	$650.624	$723.027	$432,865	$430.213	$453,807

Arthur Bauer & Associates, July 1992